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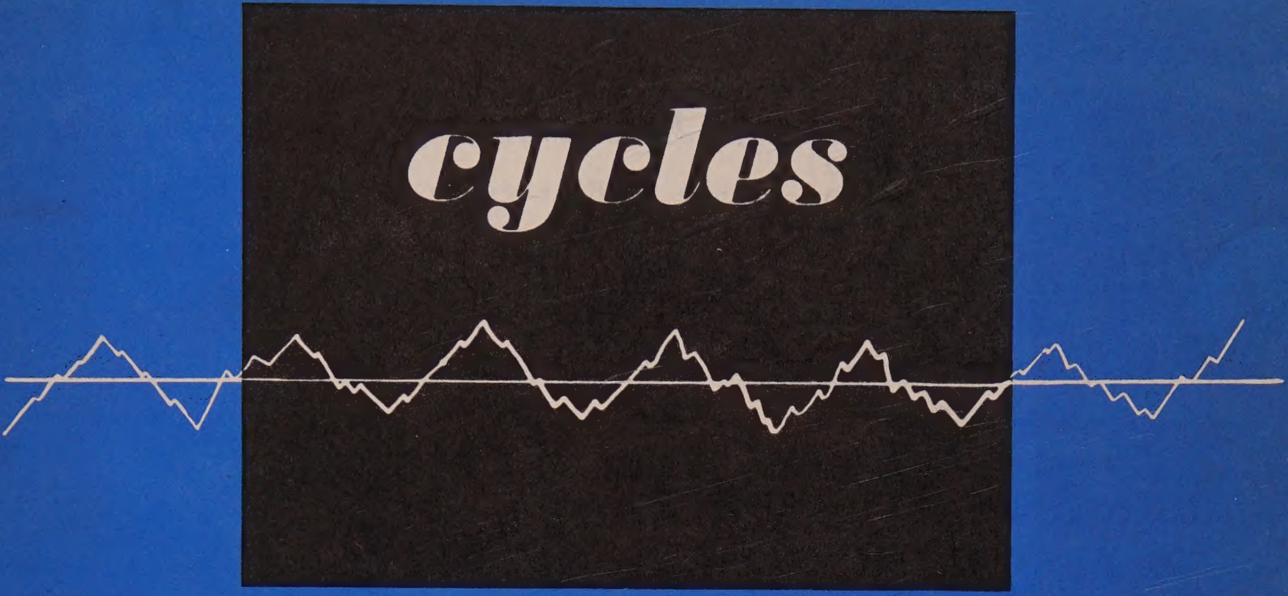

January 1958

FOUNDATION FOR THE STUDY OF CYCLES
New York, New York

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Study of Cycles

VOLUME IX NUMBER 1 JANUARY 1958

THE DIRECTOR'S LETTER

Dear Member:

Fringe Groups

I am taking very seriously to heart an amusing letter that you will find in the Letters Department on page 17 of this issue. The writer of that letter says, in essence, that there are very few egg-heads like me interested in cycles as such. Therefore, he says, I should pay more attention to the fringe groups—the people interested in some *particular* application of cycle study. Of course in saying this he is absolutely right.

With this thought in mind I am planning a number of improvements for 1958, some of them starting with this issue.

The Cycle Round-Up

For one thing, I have expanded the cycle round-up to nine pages. These pages will keep you up to date in respect to nine different things and will show you how the cycles are working out in each. The title page of the Cycle Round-Up Department gives an explanation of terms for the benefit of new members. As old members know, we also print a Glossary page from time to time.

More Research

Your support during 1957 has been so gratifying that I am now able to add another girl to the research department. This fact will result in more research for 1958.

Other People's Work

As you can see in greater detail in our Foundation Affairs Department on page 30 of this issue, we have over 2000 books, reprints, and articles about cycles in our library. Some of these make fascinating reading. If I had the time I would like to rewrite all this material and publish it for you, month-by-month, in CYCLES. I think we could devote about four pages a month to this purpose. This would get the whole job done in about 40 years.

Cycle Rewrite Man (or Woman) Needed

Here is where *you* come in! Will *you* be an assistant editor and take over the writing of one or more of these four pages every month? I could feed you the material, you could shape it up into about a newspaper column in length. I would then publish it over your name. We might even be able to pay you a nominal sum, but the main reward would be the satisfaction of doing a worth while job.

I'm hopeful that, in the course of time, one of the assistant editors would take over, on a part-time salary basis, the editing of the entire magazine, except perhaps for the Director's Letter. I could then devote myself more completely to research.

If you have any interest at all in being an assistant editor and doing a little rewrite work, please let me hear from you.

More Material

These changes will result in more pages and more material per page. The net of it is that you should receive at least a half more material in 1958 than in 1957.

Of course I know you have too much to

read now! However, I shall try to set things up so that you can find what interests you easily. The rest of it you can ignore.

Three Column Format

To give you this additional material and still hold printing costs within reason, I have used for the Cycle Round-Up Department three 32-character columns instead of two 42-character columns. Also I have made the columns a little longer. These changes enable us to get 25% more material on a page with no increase of printing costs and with but little loss of attractiveness.

I plan to extend the use of the three-column format to the rest of the report in the near future, unless you object.

Advice Needed

Have you a typographical expert in your organization who would like to give us some free advice relative to typography and lay out? I'd like to make CYCLES more readable and more attractive. If you have such a man, please write me.

Area Chairman

The following people have agreed to serve as chairmen for their respective localities in connection with the organization of get-together groups of cycle members.

Cincinnati Area.
Mr. Carl Henry,
4035 Rose Hill,
Cincinnati 29, Ohio.
Telephone: CApital 1-1899

Detroit Area,
Mr. J. R. Hornung,
Mardigan Corporation,
1139 West Grand Boulevard,
Detroit 8, Michigan.
Telephone: TYler 7-5301

New York City Area.
Mr. Jack A. Dorland,
74 Trinity Place,
New York 6, New York
Telephone: HAnover 2-7036

San Francisco Area.
Mr. Harvey Hanson,
1721 Brush Street,
Oakland 12, California.
Telephone: TEmplebar 2-5202

If you are interested in meeting with other members of the Foundation for the Study of Cycles to exchange information or techniques or to talk about cycles, and if you live in the areas indicated, get in touch with the people named above.

If you are willing to serve as the focal point for *your* area, please send me your name, address, & telephone number.

Commodity Traders Attention!

One of our members would like to give to all other commodity traders belonging to the Foundation some free sample copies of a service he has recently developed. There is, of course, no obligation and no endorsement of this service on my part. However, if you are interested, put your name on a postal card with the words "grain trader" and I will forward the cards to the member in question.

For *my* information state the commodities in which you are interested. This information will help to guide our research.

Happy New Year

I wish each and every one of you the happiest of New Years!

Cordially yours,

Ned Dewey

Edward R. Dewey
Director

WHAT'S AHEAD FOR THE SALES OF AUTOMOBILES?

THE cycles in automobile sales, as best I have so far been able to determine them, suggest sales for 1958 about equal to sales for 1957.

Admittedly this is only part of the story. Other cycles, not yet isolated, are also present. Then too, there are noncyclic random elements. And finally there is the underlying trend.

Perhaps the best way to use this cyclic knowledge about automobile sales is negatively. That is, perhaps we should say that there is nothing in the cyclic behavior of the past, as far as I have so far been able to determine it, to suggest any important advance or any precipitous decline for 1958, in spite of many opinions to the contrary.

The Cycles

The cycles so far accepted in my audit of the cycle work with respect to factory sales of automobiles are as follows:

The 2 3/4-Year Cycle
The 3-Year Cycle
The 3 1/2-Year Cycle
The 6 1/3-Year Cycle

The 2 3/4-Year Cycle

The 2 3/4-year cycle in factory sales of automobiles crests ideally at 1956.08 and at 2.72-year (32.64 month) intervals forward and backward from that time. It has an average strength of 6.2% above trend at time of ideal high. A cycle of this length is very well substantiated.

The 3-Year Cycle

The 3-year (36-month) cycle in factory sales of automobiles crests ideally at 1955.875 and at 3.0 year intervals forward and backward from that time. It has an average strength of 7.6% above trend at time of ideal high. A three year cycle is met with frequently, but not as frequently as the 2 3/4-year cycle.

The 3 1/2-Year Cycle

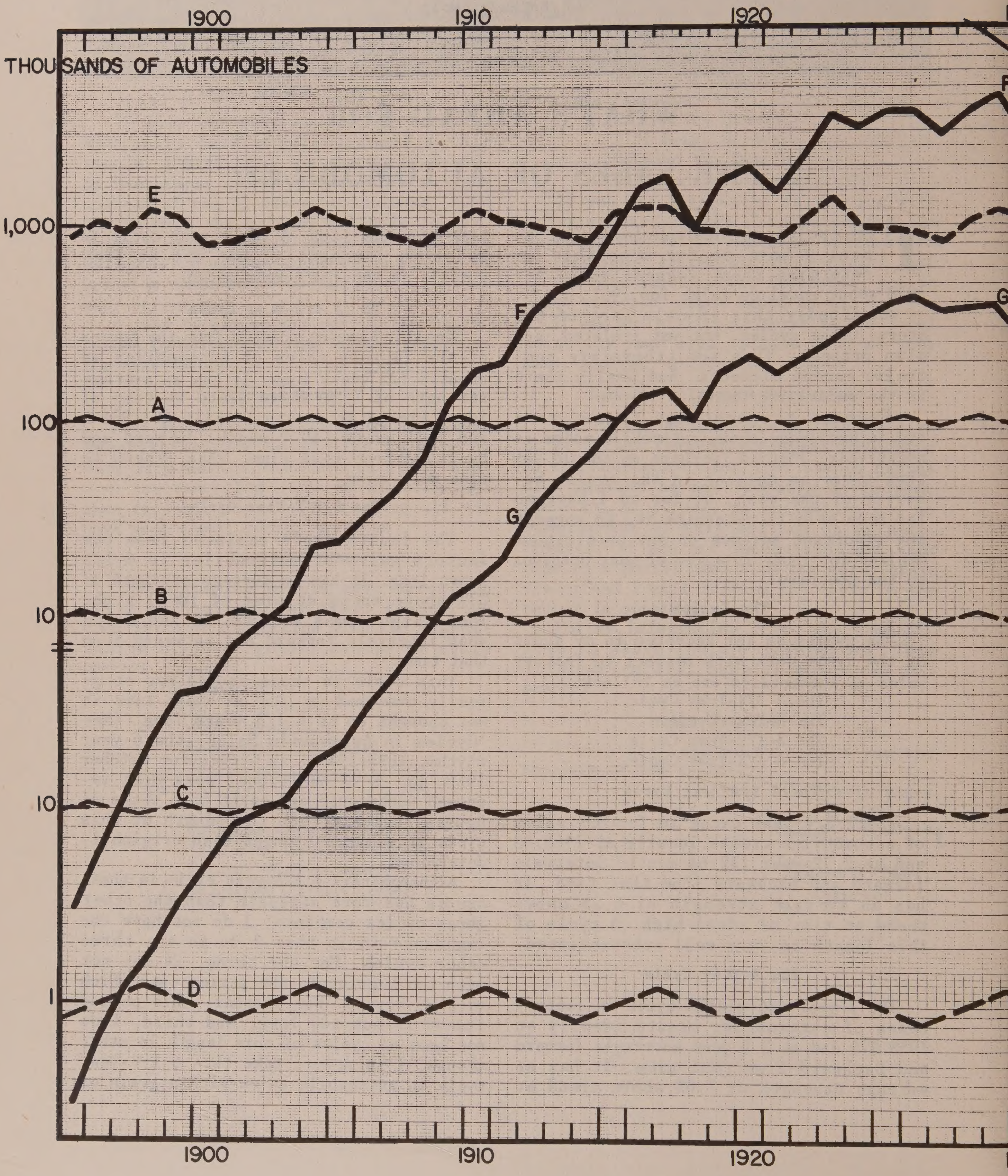
The third cycle isolated from the figures of the factory sales of automobiles is about 3 1/2 years long. It has an average strength of 7.2% above trend at time of ideal crest. It crests ideally at 1954.2 and 3.41 years (40.9 month) forward and backward from that time. This length is also well known.

The 6 1/3-Year Cycle

The fourth cycle isolated from the factory sales of automobiles is 6 1/3 years long. It has an average strength of 23% above trend at time of ideal high. Ideal high comes at 1955.28 and 6 1/3 year intervals forward and backward from that time.

This cycle in these figures was originally observed in 1950 at which time it was thought to be 6 1/8 years long. (See 'Cycles in Automobile Sales--the 6-year rhythm, 1893-1949,' in *Cycles* for October 1950, pp. 5-9) Additional work with improved techniques and eight more years of figures suggests that the length of this cycle is slightly longer than originally determined.

Although this 6 1/3-year cycle in these figures has more strength than the other three cycles combined, I do not have the confidence in it that I do in the three other cycles. For one thing, it has not been too regular in the period over which we have figures. For another, this period itself is not too long. And third, I do not know of cycles of this length in other things. I therefore take this 6 1/3-year cycle in automobile sales with a grain of


1900
1910
1920
THOUSANDS OF AUTOMOBILES
1,000
100
10
10
1
E
A
B
C
D
F
G
F
G
1900
1910
1920

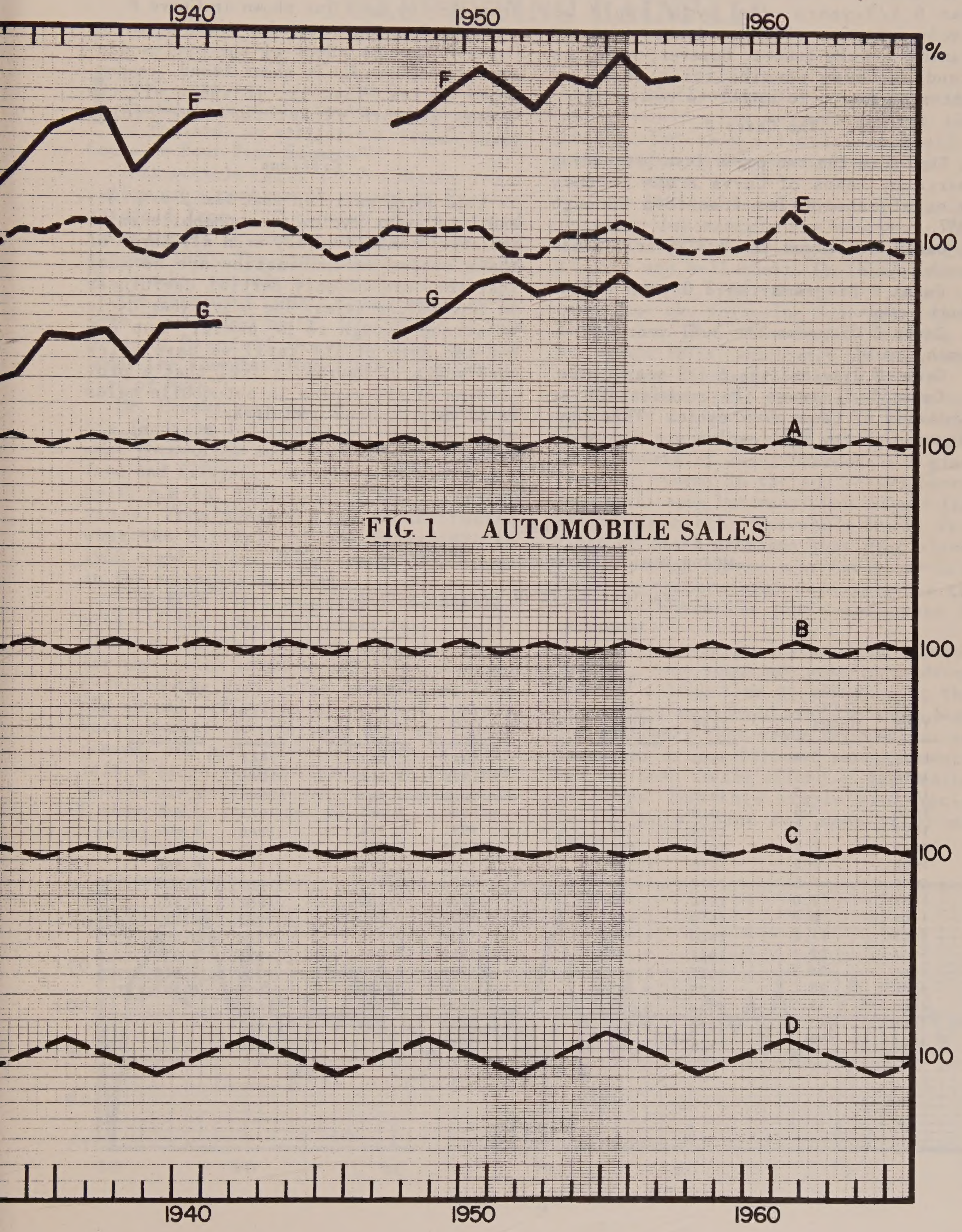


FIG. 1 AUTOMOBILE SALES

salt. The cycle *could* be longer or shorter than 6 1/3-years; the cycle *could* be merely a seriee of coincidences with no meaning for the future. However, notwithstanding these possibilities think it better to accept it rather to reject it.

The Chart

Fig. 1 on the two pages just preceeding charts by means of **Curve F** the factory sales of automobiles from 1895 through 1957.

Curve A diagrams the 2.72-year (32.64-month) cycle.

Curve B diagrams the 3.0-year (36.0-month) cycle.

Curve C diagrams the 3.41-year (40.9-month) cycle.

Curve D diagrams the 6 1/3-year cycle.

Curve E diagrams the combination or synthesis of these four cycles. This combination pretty well explains a good many of the ups and downs of automobile sales from 1895 to date, as shown in Curve F.

Curve G is the remainder after adjusting Curve F for the effect of the cycles diagramed in Curve E. It shows trend, random, other cycles. That is, it shows all the forces at work *except* the four cycles named above.

Critique

I am quite satisfied that the 2 3/4, 3-, and 3 1/2-year cycles in automobile sales are significant. However, even all three of these cycles in combination are so weak that they are of only partial usefulness in forecasting sales. The 6 1/3-year cycle is strong enough to be useful, but I'm not too sure of it! Until we have a few more years of figures, I feel that a projection of the cycles in automobile sales is of only limited usefulness.

E. R. Dewey

TABLE 1

MOTOR VEHICLE PRODUCTION. U.S.A. 1893 – 1957

FACTORY SALES OF PASSENGER CARS

YEAR	NO. IN THOUS.	YEAR	NO. IN THOUS.	YEAR	NO. IN THOUS.	YEAR	NO. IN THOUS.
1893	ONE CAR	1910	181	1927	2,937	1944	.6
1894	?	1911	199	1928	3,815	1945	69.5
1895	.3	1912	356	1929	4,587	1946	2,149
1896	.6	1913	462	1930	2,785	1947	3,558
1897	1.2	1914	544	1931	1,973	1948	3,909
1898	2.4	1915	896	1932	1,135	1949	5,114
1899	3.9	1916	1,526	1933	1,574	1950	6,666
1900	4.2	1917	1,746	1934	2,178	1951	5,338
1901	7.0	1918	943	1935	3,252	1952	4,321
1902	9.0	1919	1,652	1936	3,670	1953	6,122
1903	11.2	1920	1,906	1937	3,916	1954	5,559
1904	22.1	1921	1,468	1938	2,001	1955	7,920
1905	24.3	1922	2,274	1939	2,867	1956	5,816
1906	33.2	1923	3,625	1940	3,717	1957	6,147 EST
1907	43.0	1924	3,186	1941	3,780	1958	
1908	63.5	1925	3,735	1942	223	1959	
1909	124.	1926	3,784	1943	.1	1960	

FORECASTING RAINFALL

I HAVE just received from Dr. C. E. P. Brooks, the world famous meteorologist of England, an article entitled "Can We Count on Four Fine Summers?"*

This article tells how Dr. Brooks found cycles in a continuous record of English rainfall from 1727 through 1927 and used these cycles to predict rainfall from 1928 through 1980, The chart which accompanied Dr. Brooks' article is reproduced below.

The data used by Dr. Brooks were, as he says, "published by Dr. Glasspoole of the British Rainfall Organization in 1928 under the somewhat dismal title *Two Centuries of Rain*".

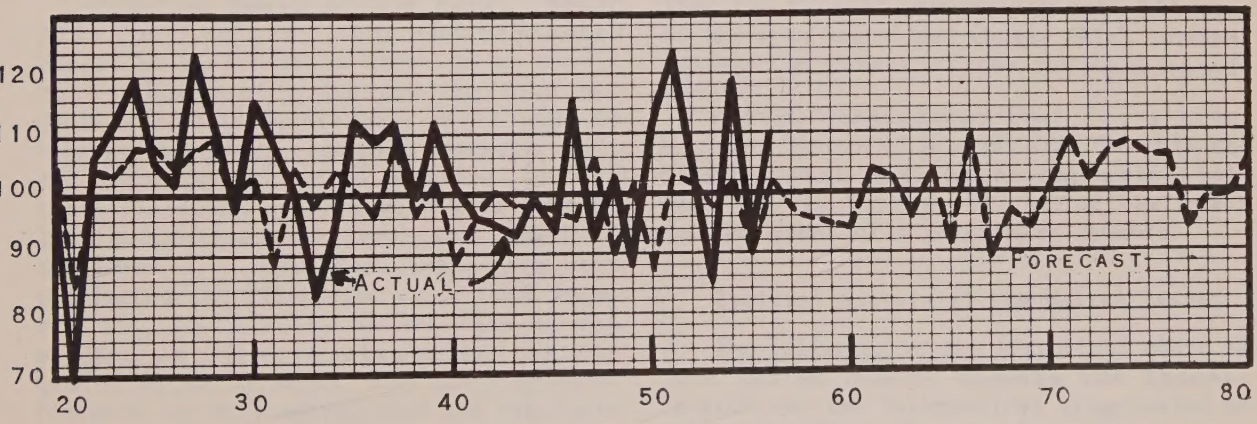
Dr. Brooks goes on to say, "I analysed his findings for cycles of rainfall. The most noteworthy ones were twenty, twenty-five and fifty-five months, and nine and a half, eleven, thirty-seven and fifty-two years. From these I have reconstructed what the rainfall of the years 1920 to 1980 ought to be. These results are shown in the accompanying chart.

"The grey curve reproduces the general trend of the actual rainfall fairly well, although the two centuries used as a basis for the curves ended in 1927. The fluctuations of the grey curve are smaller than the actual variations of rainfall, partly because they are averaged over so long a period, and partly because there is still left a large random element. To forecast the rainfall of any one year from this curve would give results better than chance, but only a little; it would be more useful to forecast the rainfall for say ten years.

"The general trend is better than the details; for example the wet years from 1922 to 1928 and the dry years from 1941 to 1945 are well shown. On this basis we could expect 1956 to be wet, as it has been, but the following four years to be rather dry. The 1970s look like being as wet as the 1870s, which were the high-water mark of the nineteenth century.

"The eleven-year cycle, the first that is really reliable enough, is the well-known sunspot cycle, which manifests itself in all sorts of ways. Sunspots are giant cyclonic storms in the sun's atmosphere, like hurricanes but many times bigger than the whole earth. The whole cycle from birth to death averages just over eleven years, and an eleven-year cycle has been found in temperature, especially in the tropics, where the sun's influence is strongest.

"Temperature is lowest, and rainfall highest, when spots are most in evidence, and for a long time it was thought that these spots interfered with the sun's heat. The discovery that trade depressions and financial crises followed sunspot maxima was put down to the effect of bad weather on crops. But this simple explanation failed to account for some other odd facts.



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* (*John Bull,* Vol. 100, No. 2626, Oct. 27, 1956).

"In 1924, a Russian investigator found that more bombs were thrown during riots in Warsaw when sunspots were numerous than when they were few. He also believed that wars and strikes flared up, geniuses became most active and suicides most numerous when the sun was most spotty. All this was because sunspots send out electrical radiations which profoundly unsettle the human brain.

"While one must take some of this with many grains of salt, it is certainly true that the sun sends out electrical radiations. The interruptions of radio communication by sunspots, and the effects of sunspots in causing auroras, are sufficient evidence. Whenever sunspots are numerous many parts of the world can expect more thunderstorms than usual. It is probably this thunderstorm effect which accounts for the eleven-year cycle of rainfall, which is observed in many parts of the world but is not particularly important in English rainfall.

"The cycle of about thirty-five years has also been known for about four centuries. Sir Francis Bacon mentioned it, and it was rediscovered in 1890 by the Austrian Bruckner, and has been named after him. Bruckner used long series of historical weather records, but he also found the cycle in waves of immigration into the United States, which he attributed to bad harvests in Europe. Actually it does not show up well in the rainfall of England, only causing a variation of about five per cent in the yearly totals, but it is more evident in plant and tree growth, which depends on the weather as a whole. The widths of annual tree rings show it clearly.

"The most important rainfall cycle in England is that of fifty-two years. At the top of this wave the rainfall averages nearly ten per cent more than at the bottom. In England, where in normal years the rainfall is little more than enough for the many demands made on our water supply, a deficit of five per cent over several years can be really serious.

"The next maximum is due in the 1970s, and until then water engineers should be able to keep pace with the increasing demand, but after that there are likely to be difficulties. The shortage may become acute by about A.D. 2000, but, of course, by then we hope something will have been done about it.

"This fifty-two year cycle has gone on for a long time. The first rain gauge in England was set up in 1677, and before that records of great droughts take us back to the Middle Ages. Dry spells were centered on or about 1496, 1540, 1613, 1653, 1707, 1743, 1790, 1850, 1895 and 1942, intervals about as regular as we are ever likely to get in weather cycles.

"The average length is almost exactly fifty years, with dry periods around the middle and end of each century. But the cycle goes back much farther than that, in fact it can be traced back to about 10,000 B.C. At that time glaciers and ice-sheets were much more extensive than they are today, but they were melting quickly, and the rate of melting has been measured year by year in several parts of the world. It waxed and waned in a cycle of fifty-one years. No one knows the cause of the cycle, but the facts are indisputable."

E. R. D.

1959 AND A CYCLICAL THEORY OF HISTORY

by

Edward A. Lewin

BEARD*, Spengler, Kant, Hagel, and Collingwood are but a few of the great scholars of history and sociology who have found time sequences or cycles in the birth, development, and death of nations.

Oswald Spengler, in his frankly titled, "Decline of the West," states, "Each culture has a special character of its own . . . an identical life-cycle . . . it begins . . . develops . . . than congealing into decadence . . . its life ends." "Further . . . not only is the cycle of phases fixed, but the time which it takes is fixed; so that if we nowadays, for example, can detect the point at which we stand in the cycle of our own culture, we can accurately foretell what the future phases of it will be."

Up to the present, no claim has been made, as far as this writer is aware, for the discovery of a specific mathematical progression to which the 'life-cycle' of any nation has coincided. This writer has found what might be called such a 'life-cycle' in the history of the United States. He hastens to add that there is insufficient basis as yet to claim the discovery of a historical law which charts the cyclical life of this nation. Nevertheless, if the year 1959, toward which this progression points, yields an epochal event, at that time any timidity in making such a claim should perhaps, be overcome.

Publication of this cyclical theory could well be deferred until that time too, but as the next epochal event in the United States may involve atomic usage which in turn may end all the usefulness of a cyclical law of history and everything else, the writer will be so bold to offer up his findings prematurely, with the hope that something constructive might nevertheless come of it.

Before demonstrating the chart of past epochal events in America's history and the mathematical progression to which they have conformed, it is well to outline some of the tests which a cyclical theory of history would have to pass, as follows:

First: a definite mathematical progression in the time lapses of the Cycle.

Second: proved Epochal status of the particular events in evaluating the history of the country.

Third: the Epochal events must coincide with the time lapse.

Fourth: Causation, that is, evidence that the Epochal occurrences were Effects of previous historical Causes which in time become the Causes of the new historical Effects.

Fifth: Prescience, that is, a true Cyclical Theory of History must be able to predict with meaningful approximation when in the future will occur the next Epochal event of a particular country.

Cyclical History of the United States

The following is the historical chart of the United States showing the Epochal events and the Mathematical Progression to which the Events have conformed:

---

*Charles Beard in his book, "Human Affairs," writes, "For the historian competent to handle it there is at hand a huge library of books tracing time sequences in the development pertaining to liberty, goverance, society, commerce . . . and every type of social practice . . . In these histories are revealed with more or less completeness the rise and growth of the ideas . . . and these ideas have been catalogued and classified . . . Such ideas are not, to be sure, as definite as the stones or flowers classified by the geologist or botanist, but their general features are well established and available to competence."

CYCLICAL HISTORY OF THE UNITED STATES

The following is the historical chart of the United States showing the Epochal events and the Mathamatical Progression to which the Events have conformed:

1st Cycle	May 13,	1607 - First Permanent American Settlement, Jamestown, Va.	
2nd	July 4,	1776 - Declaration of Independence. -----169 year lapse.	1/1st Cycle of 169 years.
3rd	Feb. 4,	1861 - Secession; Civil War. -----84½ year lapse.	1/2 of 169 years.
4th	April 6,	1917 - Era of World Wars. -----56 year lapse.	1/3 of 169 years.
5th	July 16,	1945 - Atomic Era; First Bomb -----28 year lapse.	1/6 of 169 years.

The above relation to the basic 169 year cycle of 1/1, 1/2, 1/3, 1/6 is a definite decreasing arithmetic progression where the sum of all previous denominators becomes the denominator of the next fraction. To continue this pattern and project, we have

the 6th Cycle	1959 - Next U. S. Epochal Event -----14 year lapse.	1/12 of 169 years.

Space limitations do not permit the writer to demonstrate his background material in sociological and historical support of this cyclical theory for the United States. He considers that additional material fully as important, if not more so, than the mathamatical demonstration which is necessarily limited because it is still only 1958.

However, for those who are interested, the writer will be glad to send the complete article of fifteen pages, of which the above represents only the first two pages. The full manuscript provides the reasons why the above events justify their designation as of *epochal* importance, the basis of *causation* in the unfolding of American history, the *precedent* of a time cycle in the history of Ancient Greece, a chart showing *acceleration* in historical events over many thousands of years, cyclical patterns in *other* nations, and a survey of opinion of great social scientists who support the philosophy of definite time patterns in the historical development of nations. If possible, kindly include 25¢ to cover cost of printing and mailing. Address, Edward A. Lewin, 148 Forsyth Street, N. Y. 2, N. Y.

Editor's Note: Mr. Lewin's scholarly reservations need to be echoed by the editor. Before we are justified in accepting Mr. Lewin's progression as valid we should see if this progression continues, if similar progressions are present in other historical sequences.

On the other hand Mr. Lewin's relationships *are* dramatic. And 1959 could well be a year of crisis. Who am I to say that this progression has no meaning?

In printing this article we are getting out of our field, which is *rhythmic* cycles, into the larger field of *pattern* of which it is a part. I shall try not to digress again!

E. R. D.

Technical

ANOTHER WAY OF LOOKING AT CYCLES

BELOW I have printed for you a table (Table 1) showing monthly temperature at San Francisco over a 10-year period. The figures are so small you can barely read them, but no matter; I merely want you to get the idea.

Across the top of the table are the months; down the side are the years; in the appropriate places are the actual temperature figures in degrees. Across the bottom of the table are the *averages* for each of the 12 months. This bottom line constitutes what we would call the average 12-month San Francisco temperature cycle. It is charted in Fig. 1 below. The actual values, big enough to read, are given in Table 2.

Table 2

Jan.	50.1	July	58.5
Feb.	52.5	Aug.	58.9
Mar.	55.1	Sept.	61.5
Apr.	56.0	Oct.	60.6
May	57.6	Nov.	56.8
June	58.6	Dec.	52.0

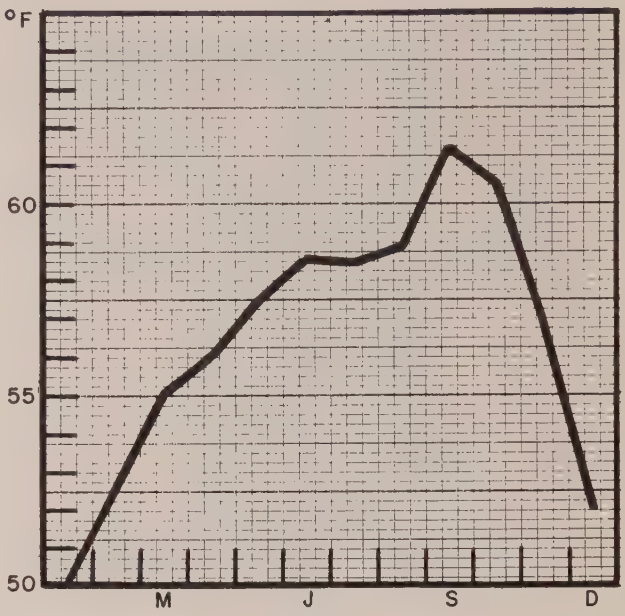


FIG. 1
Average seasonal temperature at San Francisco, in degrees F., 1931—1940.

Table 1

TEMPERATURE IN DEGREES F. $h_t = 208$ ft.
Means of ½(daily Max.+daily Min.), corrected to 24 hours

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean
1931	51.9	56.0	58.1	58.0	60.9	60.8	61.0	59.2	61.5	58.4	53.5	49.0	**57.4**
1932	48.9	50.7	56.2	55.0	57.5	58.0	58.4	59.8	61.7	60.8	59.7	47.0	**56.1**
1933	46.6	50.5	54.5	54.5	54.3	56.4	58.2	58.6	59.9	61.0	59.1	50.1	**55.3**
1934	51.4	54.9	59.7	58.0	59.7	59.8	58.7	59.7	62.3	60.4	57.6	52.5	**57.9**
1935	50.4	53.4	51.7	57.7	57.8	60.1	58.9	58.8	59.3	59.6	53.9	52.4	**56.2**
1936	53.4	52.7	56.5	57.9	60.6	60.5	58.1	58.1	61.7	60.8	57.1	51.2	**57.4**
1937	43.2	49.2	53.9	53.5	56.3	60.2	58.0	57.7	60.1	62.0	57.3	54.4	**55.5**
1938	51.0	52.3	51.9	53.9	55.7	56.3	57.5	58.9	59.9	60.2	55.9	53.2	**55.6**
1939	51.6	50.5	51.9	54.8	56.1	56.6	57.7	59.4	64.9	61.6	58.3	54.9	**56.5**
1940	52.2	54.7	56.5	56.8	57.1	57.8	58.9	58.8	63.7	60.9	56.1	55.0	**57.4**
Mean	**50.1**	**52.5**	**55.1**	**56.0**	**57.6**	**58.6**	**58.5**	**58.9**	**61.5**	**60.6**	**56.8**	**52.0**	**56.5**

As you can see, September is, on the average, the month of highest temperature. It is therefore the crest of the ideal 12-month cycle. It is the most probable month of crest for the summer of 1958.

How much heat may we expect in September 1958? Here is what happened in previous Septembers ranked according to size:

Table 3

September	1939	64.9		
	1940	63.7		
	1934	62.3		
	1932	61.7		
	1936	61.7	Majority Range	3/4 range
	1931	61.5		
	1937	60.1		
	1933	59.9		
	1938	59.9		
	1935	59.3		
Average		61.5		

This behavior can be charted as in Fig. 2.

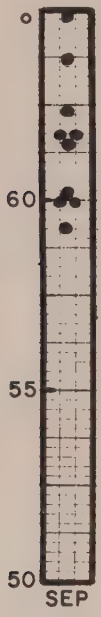


FIG. 2
Temperatures for Septembers, 1931—1940 at San Francisco. The average of these values gives the value for September charted in Fig. 1.

The Odds for 1958

From Table 3 we see that the six middle values lie between 59.9 and 62.3. The odds are therefore 6 to 4, or better than 50-50, that these limits will be true for 1958, as far as we can tell from the given record.

We also see that the 8 middle values lie between 59.9 and 63.7. The odds are therefore 8 to 2 (4 to 1) that these limits will prevail for the next—or any other—wave, as best we can tell from the sample given.

Of course September may not be the month of highest temperature. Study of our figures shows us that one crest came in June, three in October. This fact could be charted as in Fig. 3.

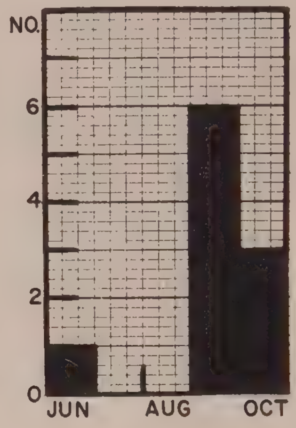


FIG. 3
Distribution of hottest months, San Francisco, 1931—1940. In 1935 June was the hottest month. In 1933, 1937, and 1938 the hottest month was October. In the other years the hottest months came in September.

We could therefore state the situation as follows: Based on the sample given, the odds are 6 to 4 that any given September will be the month of greatest temperatures; the odds are 8 to 2 that temperatures for any given September will lie between 59.9 and 63.7.

This is the sort of information I have been giving you about cycles of various sorts; it has its values.

Another Way to Look at Things

However, suppose you are interested in the *peak* month, *regardless of when it comes.* The biggest months of each *season,* ranked according to size, make a table that looks like this:

Table 4

September	1939	64.9		
	1940	63.7		3/4 Range
	1934	62.3	Majority Range	
October	1937	62.0		
September	1932	61.7		
	1936	61.7		
	1931	61.5		
October	1933	61.0		
	1938	60.2		
June	1935	60.1		
Average		62.0		

This average is higher than the other one because we have not limited ourselves to the month that *normally* is highest, but have taken the month that *actually* is highest, regardless of what month it is.

The facts stated above can be charted as in Fig. 4.

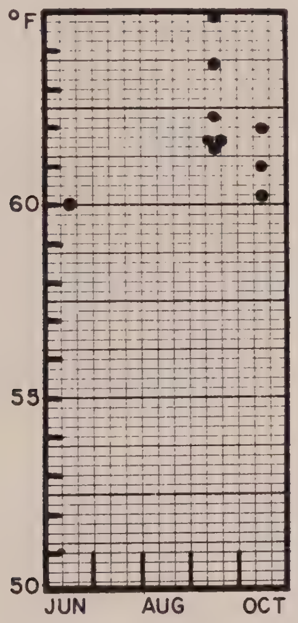


FIG. 4
Temperatures of the hottest month of the San Francisco, 1931—1940, regardless of the month in which it came.

Note that the average of Table 4 and Fig. 4 is 62.0 which is somewhat higher than 61.5, the average in Table 3 and Fig. 3. This is because Fig. 4 is an average of the *warmest* months, no matter when they came, whereas Fig. 3 was merely an average of the Septembers, which *mostly* but not every time are warmest.

There are circumstances where an average of the sort shown in Fig. 4 is preferable to the sort of average shown in Fig. 3. It all depends on what you want to know.

Scatter Diagram May be Better

I'm inclined to think that, where there is but one cycle involved, a scatter diagram of the sort shown in Fig. 4 may be better than the lines I have been drawing for you. The lines are good when you want to combine several cycles, but when you want to know the strength of the crest, *regardless of when it comes,* the scatter diagram may be better. Of course you can do it both ways, thus:

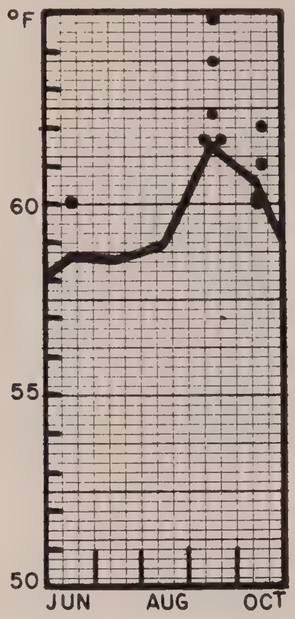


FIG. 5
Temperatures of the hottest month of the year, San Francisco 1931—1940, regardless of the month in which it came, in comparison with the average seasonal temperature. In other words, this chart combines Fig. 4 with part of Fig. 1.

Both Ways Can be Used

Fig. 5 shows you why the actual crest, when it comes, is often so much stronger than the crest indicated by a projection of the cycle.

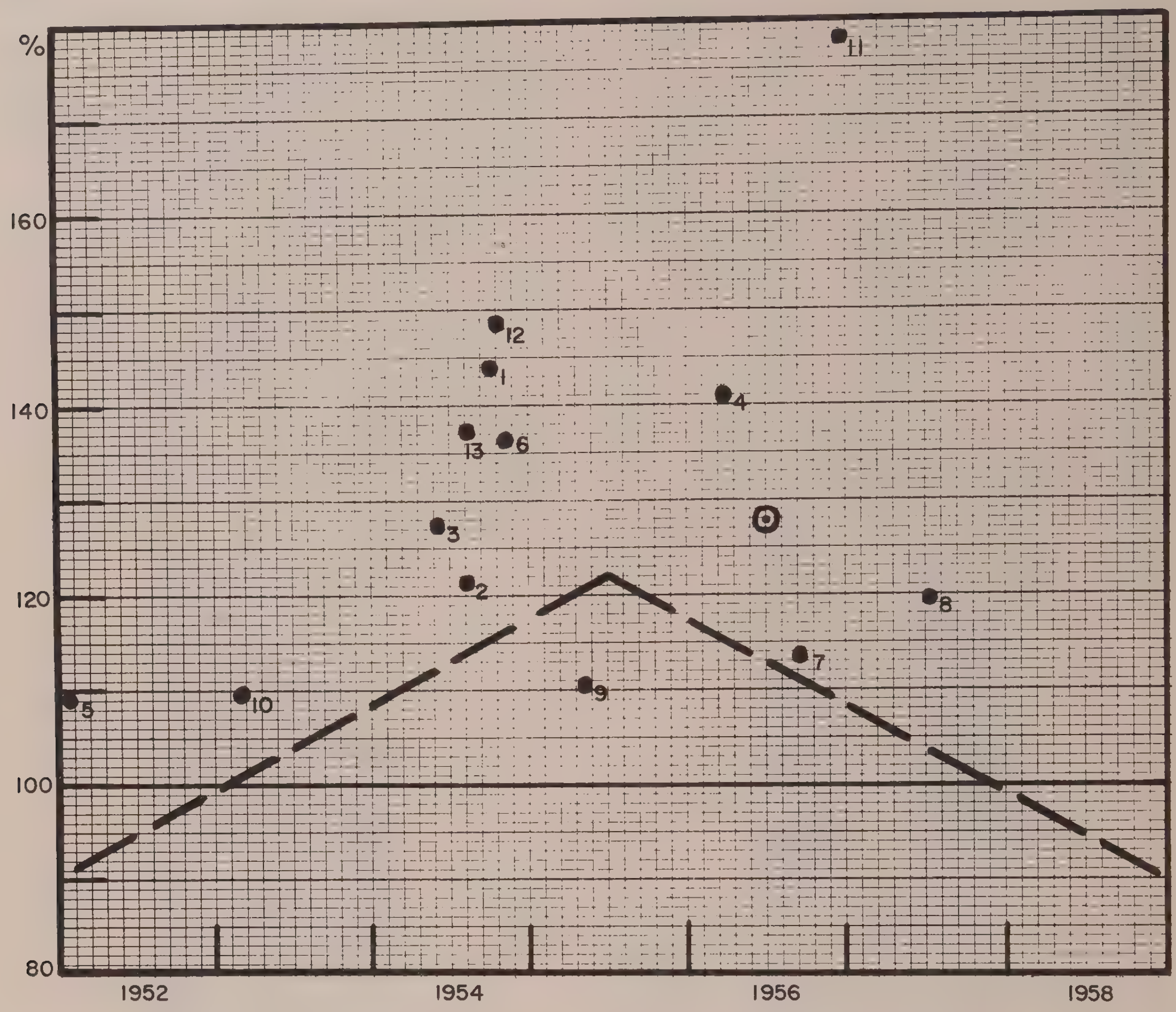


FIG. 6. THE 9.2-YEAR CYCLE IN RAILROAD STOCK PRICES

Broken line: Ideal cycle, in percentages above or below trend.

Solid dots: Previous crests, correct for timing and strength, relative to ideal cycle.

Open dot : Crest of the current cycle, if the crest came in 1956.

An Application To Stocks

Let us apply this method of presentation to one of the cycles we have been following namely the 9.2-year cycle in rail stock prices.

The ideal 9.2-year cycle in rail stock prices, in percentages above trend is shown by the zigzag line in Fig. 6. This is the old method of presentation. Now let us add, by means of ●'s, a representation of all previous 9.2-year crests. These crests are plotted correctly for strength (in percent above trend) and in timing (years before or years after perfect timing), as they would fall if they were to repeat at the present time.

Thus the ● labeled 1 is as much above trend and as much before perfect timing as the crest of 1835; the ● labeled 2 is as much above trend and as much before perfect timing as the crest of 1844; and so on.

E. R. D.

Letters

MISSING THE BOAT

Dear Mr. Cycles:

I ought to charge you for writing you such a good letter as this is going to be, but since I am at my office and not at home, I cannot remember your name; but you are the boss that works for nothing and went to Chicago and New York and held those two meetings for members to discuss the future of our fine Foundation of which I am a paying member as you can see from my check for renewal enclosed in this letter.

To Get Down to Business

Now to get down to business, it is obvious that you had the two meetings for members as reported in the November booklet so you could learn something how to better run the magazine, and I know during the past year you have had other meetings over the country with members as reported from time to time. I am also fammliar with the fact that in the Foundation organization, there is a horrible fifty percent failure renewal for each year which puts us to the terrible expense of spending a high amount of our revenue sending out letters to get new members to keep us going. As you point out, you even lose money on the first $10.00 subscriber because his service costs $11.00 for the first year. That is a hell of a way to run a business! Now, I am an expert along this particular line of increasing memberships and not losing money and I have lived through the exact same experiences during the last twenty years with an organization doing an equally specialized business.

International President

I recently retired as International President of that organization which is world wide and I had spent many years with them from their humble beginning and they ended up the largest by far of all organizations of our sort all over the world with branches in 15 or 20 foreign countries, and a world wide membership of many, many thousands. One of the benefits of membership includes the receiving monthly of a magazine like you put out for the Foundation, but the difference is, our present magazine averages monthly between 150 and 200 pages. The magazine is not for sale but is printed exclusively for our members and we are organized as a non-profit organization. We also have some $30,000 or $40,000 surplus in our printing account and are continuing to grow, and by now have trained up enough younger talent to where there are plenty of replacements including plenty of replacements for me. Now, I hasten to add that not all of this work was done by me alone, of course, and perhaps, not even half of it or one-fourth of it, because I was smart enough to get other people to help and there were people helping before I started.

One Man Organization

Now, many years ago when I joined the organization, it was similar to your present group and was a one-man organization and was even losing money for that one man and had very few members, relatively. It even had a competitor, which was ten times stronger and much better run. However, not run on a standard and ethics to benefit the members which suited my fancy and the others like me who were in my organization. I said it was a one-man organization and the one man was a retired rich business man, so he put up his own money; he being retired, and tried to create this organization, and of course, there was a little bit behind the story before he took charge but it is an unsuccessful past, financially speaking, and not enough money came in to print the magazine, even a small one. I joined him first as a legal adviser and then later I held all the other offices the organization had, up to and including the title I retired with as International President, which means of the world. Let me add once again, it wasn't all my own work but I was able to visualize the problem and from time to time encourage the appointment of various people for a small segment of service and then encourage that segment to produce its own result. It is unimportant what these segments were, but I can illustrate by saying we started out with everything being run by one man and one office girl and ended up with over three hundred officials with badges and buttons and honors and some of them having columns in the magazine.

Broke!

Now, in the beginning, we not only were broke, but the man I have spoken of had to get another man elected president, so we could borrow $1,000. from him to pay for the printing of the magazine one year. By now, we have enough reserve to print the magazine for several years if no members pay anything.

Now, I am telling you all this so you might have an idea I know a little about what I am talking about and after reading the Foundation-Cycles Magazine for a year, it makes my heart bleed to see such a fine effort to serve humanity floundering around putting all the burden on one man, that is you, and not being at least self supporting. Now you might say cycles only interest a certain type of people. Well, by God, my subject only interests certain types of people also. Both operate in a limited field. The best I can figure it, the saturation point for membership in my organization is 15,000 people. Of course, I can be wrong. However, I think the saturation point for the study of cycles surely must be in extend of 100,000.

Your Problem

Now, to get down to your problem, it is similar to mine in some respects. Actually, the people who should be devoted and will get the most good out of my field are naturally those people who make a living out of it or to whom it is very, very useful to their business and social life. Of course, the number of professional people who make a living out of it is numbered in the hundreds and not in the thousands and even including those people interested my potential customers or members on cold blooded basis of actual need for a monthly magazine in the United States would perhaps be 1,000 or 1,200, I imagine in the study of cycles those who are intelligent enough to really make and produce a cycle even if they have all the figures for the last 100 years are of a very limited number. Perhaps, that would include college professors in mathematics, a few high school teachers and of course, the specialists in some of the finance and business houses, so you are up against a tough proposition to begin with when you have a specialized service.

The Fringe

Now to look at it on the broader aspect, there are a lot of people who actually don't understand the making of a cycle or even the interpreting of one, but they can be interested if it happens to match up with one of their items of thinking. That is the same way with my field. A lot of people are interested and like to read about it but they have never done anything about it. Therefore, I conceived of the idea that I had to give those *'fringe'* fellows something they would enjoy month after month so they would keep reading the magazine that we put out.

I have so far failed to mention that the principal benefit of being a member of my organization, is the fact that they get a monthly magazine dealing with our subject and that's all. True, there are a few large cities where there are membership meetings and even a few countries where we have groups who meet regularly, but the greatest part of the membership consists of isolated persons who only get the magazine that they continue to renew year after year with a lapse ratio or failure to renew ratio of between 10 to 20 percent at the most, and it is very rare that those who do lapse or quit do so after a year or so only. They nearly always stay in several years before they lapse out.

The Half-Hearted Member

Now, remember, I have studied very carefully the problem of what interested the half-hearted member. It is no problem to keep the dyed in the wool fanatic. It is those weak sisters or brothers that I have to appeal to. So we studied and built the magazine up to supply them with a reason to keep renewing. There are several 'gimmicks' we used, but you will have to develop your own.

Now to get down to the cycles magazine, I guess you will admit that is about all the member gets unless he happens to live in Chicago or New York where the members sometimes get together, so you are faced with my same situation.

In reading your preliminary 'come-on' literature I must say it is very enticing and has a great appeal for many people. For instance, it interested me, but after the member signs up you start sending him the magazine, and it shows cycles of pig iron, cycles of war, cycles of rings on trees, cycles of a lot of other, mostly scientific data which is bound to appeal to the fanatic cycle enthusiast of a highly intellectual capacity. Is it good? Hell yes. But only to a limited number of your readers and you will have to agree I am telling the truth or else why is there a fifty percent failure to renew membership each year? Now by purpose I left off mentioning that occasionally you have printed cycles, one on corn and one on wheat prices and maybe a hint more or less at the stock market. Now, my dear friend, I realize and have sense enough to know that cycles don't prove anything for the future but only show the rhythm of re-occurring patterns in the past, which leaves us to the conclusion that the odds are that the rhythm will continue if some new disturbing influence doesn't interfere with the future and even those disturbing influences have occurred in the past and are themselves subject to analysis.

Cycles Not Infallible

In other words, I have sense enough to realize that wheat prices might go up for two years and down for two years for a hundred years without one failure and starting the next year the pattern could be broken by a government policy or law or rule or dabbling of an unusual nature which would upset the pattern, so if the chart printed in the cycles magazine showed the pattern of wheat for the past one hundred years as to its rise and fall in price, I might still decide to gamble on buying wheat *and lose*, but what difference does that make? If I am a man who likes to buy wheat and sell wheat I am interested in the wheat and want to know what has happened to wheat in the past. Now, I mentioned wheat only as an example because you probably have in the United States 5,000 to 10,000 people who are very interested in corn, and other commodities. You even have a million interested in stocks and so you have an unlimited number of customers, and possible members, if you regularly devoted a small part of your *monthly* magazine to a chart and discussion of possible cycles which would interest a large group of people. Of course, you could be honorable about this feature and offer it for exactly what it was and you could even in the article warn the reader that you are not forecasting a damned thing. I happen to know there are advisory services, probably at least two hundred of them, who perhaps, have more members subscribe to their services for from $60 to $200 a year who do not give their readers as good information and as interesting information as you could give on cycles of commodities. Now you might say there are no cycles in commodities, but I doubt if you would be that naive. Not to insult your intelligence, but it happened to be over in one of my desks I had thrown away a chart prepared by one of the largest brokerage houses, Merrill Lynch, which shows about a forty year run on 15 different commodities, and if you will look at it then you will see definitely that there seems to appear the element of cycles on all of them and I call your attention to the one particularly on eggs, I am sure that the price of eggs would reveal a very definite cycle and I hasten to add that I am not interested in eggs only to eat them for breakfast, and I also hasten to add that I don't have a single commitment on the commodity market. It has been years since I bought or sold any wheat or corn or other commodities on a speculative basis but it has always interested me and I read the Wall Street Journal every morning, mostly the front page.

You Are Missing the Boat

Now, my sole thought is that I believe you are missing the boat by not analyzing your possible market for membership and try to include some section, regularly, every month, which you will need to make an appeal to what I have designated as a 'fringe' element of those interested in cycles. I am saying this in all sincerity and will, be, of course, only too glad to correspond with you, to the best of my ability, if I can be of any service to you. I cannot write too often or too long because I have to make a living, but I thought several months about maybe writing you a letter, which I have now done. I hope I have gotten over the point involved because you do have a very fascinating field and from reading the magazine, I am sure you have been a devoted student of cycles and I would like to see the magazine and its membership expand to where it is not such a burden on you as an individual. In time, you can enlist the support of others who will share the responsibility with you and still not abandon the very fine motive you have in the study of this most fascinating subject.

With the most sincere appreciation for what you have already done, I remain,

Sincerely yours,

Questions & Answers

COMPARISON OF DOW JONES AND STANDARD & POOR'S INDEXES

Dear Mr. Dewey:

In your July issue you show on p. 176 stock market cycle and trend as related to Standard and Poor's combined stock price index. Would you mind plotting the Dow-Jones averages on your chart and sending it to me?

Yours very truly,
Dale G. Hollenbeck

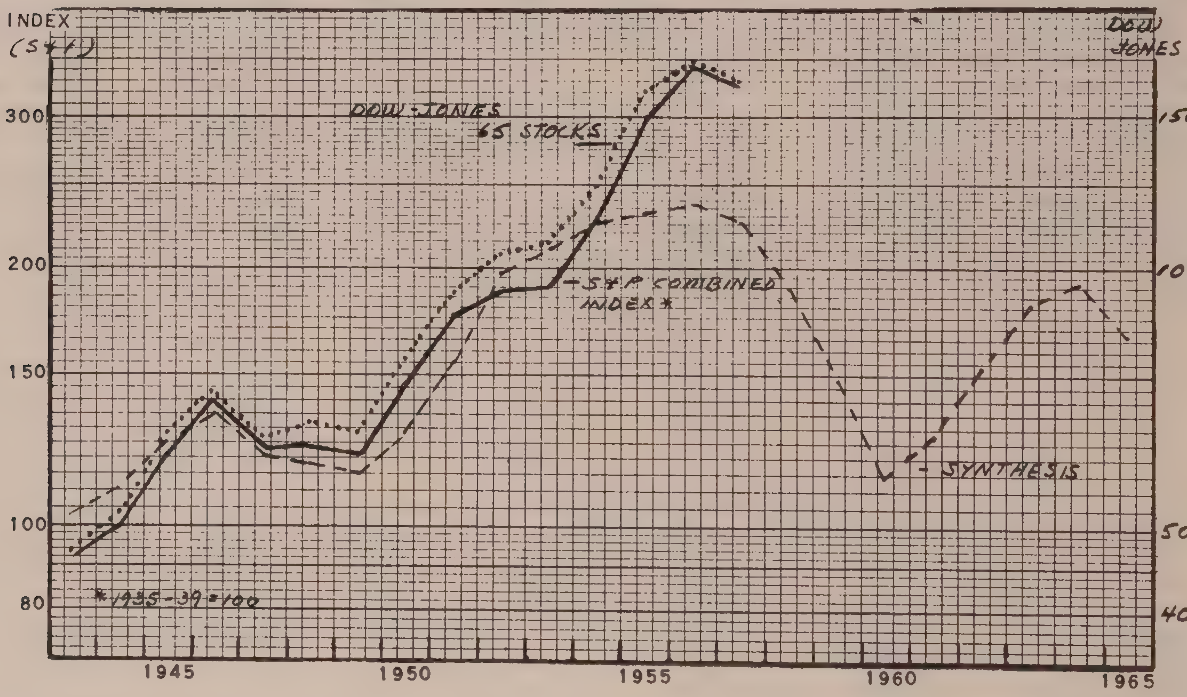
Lodi, California

In Reply I Said

Here is the chart that you requested.

Note that we have plotted the Dow Jones *Composite* Index (65 stocks) rather than the Dow Jones *Industrial* Index (30 stocks). We did this because the Standard & Poor's Corporation index used was a composite. Both composites include rails and utilities as well as industrials.

Cordially yours,



Solid line; 1943—1957, Standard & Poor's Corporation Combined Stock Price Index (1935-39 = 100), as this index actually unfolded.
Broken line, 1943—1965, a combination of 5 cycles as determined in 1944, trend and a 27-year cycle as determined in 1956, and the 22-, 12.8-, 9.18-, 8.17-, and 5.91-year cycles as revised in 1956 and in 1957.
Dotted line, 1943--1957 Dow Jones 65 stocks.

JANUARY CYCLE ROUND-UP

THIS department will give you the latest available values of various series of figures. These are figures that I have studied for cycles and that I have told you about in previous reports. This department will show you the extent to which the cycles are or are not continuing to dominate.

Only a few of the hundreds of things I have discussed in our 80 previous reports can be brought up to date in any one issue. This issue brings up to date the following series of figures and cycles:

Stock prices (11 cycles)
Interest rates (1 cycle)
International battles (4 cycles)
Sunspot numbers (1 cycle)
Failures (liabilities) (4 cycles)
Copper prices (5 cycles)
Corn prices (5 cycles)
Wheat prices (1 cycle)
Res. bldg. const. (2 cycles)

Other series of figures will be substituted from time to time.

CONCEPTS AND TERMS

It may be helpful if I used the rest of this page to explain to you some concepts and terms.

CONCEPTS

The concept of cycles is very simple. When a series of figures increases and decreases at intervals that recur with reasonable regularity, you have what is known as a **rhythmic cycle**. When such a cycle continues for *enough* waves and/or with *enough* regularity, we have behavior that cannot reasonable be random. If the regularity isn't random, it is unwise to ignore the possibility that it may continue.

Of course, even if wheat prices, let us say, have gone up for two years and down for two years regularly for the past hundred years, we don't *know* that they are going to continue to do so for the four years next following; but the fellow who ignores the possibility would be foolish indeed.

TERMS

The terminology of cycle study is based on the fact that you usually *chart* the successive numerical values of the events you are studying. As a result of this fact we refer to an *increase* of value over a period of time as an **up**, a *decrease* of value over a period of time as a **down**.

Waves

An up and a down together constitute a **wave**, because the chart of such a movement looks like the cross sections of a wave of water. A wave is thus one complete oscillation from a bottom to a top to a bottom again; or, if you prefer, from a top to a bottom to a top.

The bottom of a wave is called a **low**, a **valley**, a **bottom**, or a **trough**; the top of a wave is called a **high**, a **peak**, a **top**, or a **crest**.

Waves have length, strength, shape, and timing.

The **length of a wave** can be measured from one bottom to the next, or one top to the next. In cycle study length is measured in *time*. For example a wave that goes up for two years and then down for two years is spoken of as a four year wave.

The **strength of a wave** is measured from its top *or* its bottom to a line more or less midway between the two called the **axis**. Strength is usually measured in percent. The strength of a wave is also called its **amplitude** or its **height**. Amplitudes can be *positive* from the axis to a top, or *negative* from the axis to a bottom. For example the strength or amplitude of some particular wave might be 10%. That is, the top might be 10% above the axis.

There are various wave **shapes**. One shape is *zigzag*.

The **timing of a wave** is the calendar time of a top or a bottom, as stated. For example, a wave might have a top in January 1957.

Cycles

A single wave is sometimes called a **cycle**, but the word cycle is more often used to refer to a sucession of waves, each of about the same length.

The **length of the cycle** is the average length of the waves which make it up. For example, a 12-month cycle is one made up of waves that *average* 12-months long, even though the individual waves might be a mixture of 10, 11, 12, 13, or 14 months waves.

Ideal Highs and Lows

The time of **ideal high** is the time when the high most usually comes. For example, *on the average* in New York City the weather gets hotter and hotter until July 23rd; then cooler and cooler. July 23rd would therefore be the time of *ideal* high. In any given year the **actual high** would of course probably come early or late.

Trend

Trend is the *underlying* tendency of a series of figures. It changes its direction *gradually*, in contrast to the actual figures which jump up and down. Trend is an imaginary line on the chart that goes more or less midway between the tops and the bottom of the waves.

E. R. D.

STOCK PRICES

As you know, the synthesis of 11 stock market cycles is *downward* at the present time. It suggests that, if the cycles of the past dominate, the index for the year 1958 as a whole should, on the average, be less than the index for the year 1957 as a whole. Further decline is suggested for 1959, and for 1960.

The 11 Cycles

The 11 cycles used in the synthesis, with their lengths, strengths, and timings, are given in the table below:

Length in Years	Strength (Average Percent Above Trend at Ideal Time of High)	Timing (Date of the Current Ideal High)
4.89	3.5%	1954.41
5.50	7.0%	1958.00
5.91	6.4%	1958.69
6.86	8.3%	1957.40
8.17	4.7%	1954.16
9.18	17.1%	1955.66
11.0	3.8%	1952.50
12.8	10.9%	1953.90
14.5	12.25%	1957.50
22.0	21.6%	1952.60
27.0	14.3%	1956.50

These cycles were isolated from the Standard & Poor's Corporation Combined Index, 1871--1943 and, in some instances, 1871--1956.

This study does not attempt to pin-point either the levels or the time of the coming trough. If the low of the present wave should come in 1959, 1960, or 1961, I shall be very well satisfied indeed. It does however suggest that we are in a period where continued caution is in order.

Actual Prices

Actual value of the Standard & Poor's Corporation Combined Index (now 500 stocks, 1941-43= 10) for the year 1956 as a whole was 46.62. For 1957 as a whole it was 44.38p.

Recent values of the index are:

Month (1957)	Index
August	45.84
September	43.98
October	41.24
November	40.35
December	40.38p.

Similar figures for the Dow Jones and Company, Inc. Industrial averages (30 stocks) are:

Month 1957	Average
July	514.64
August	487.97
September	471.79
October	443.38
November	437.25
December	437.52p.

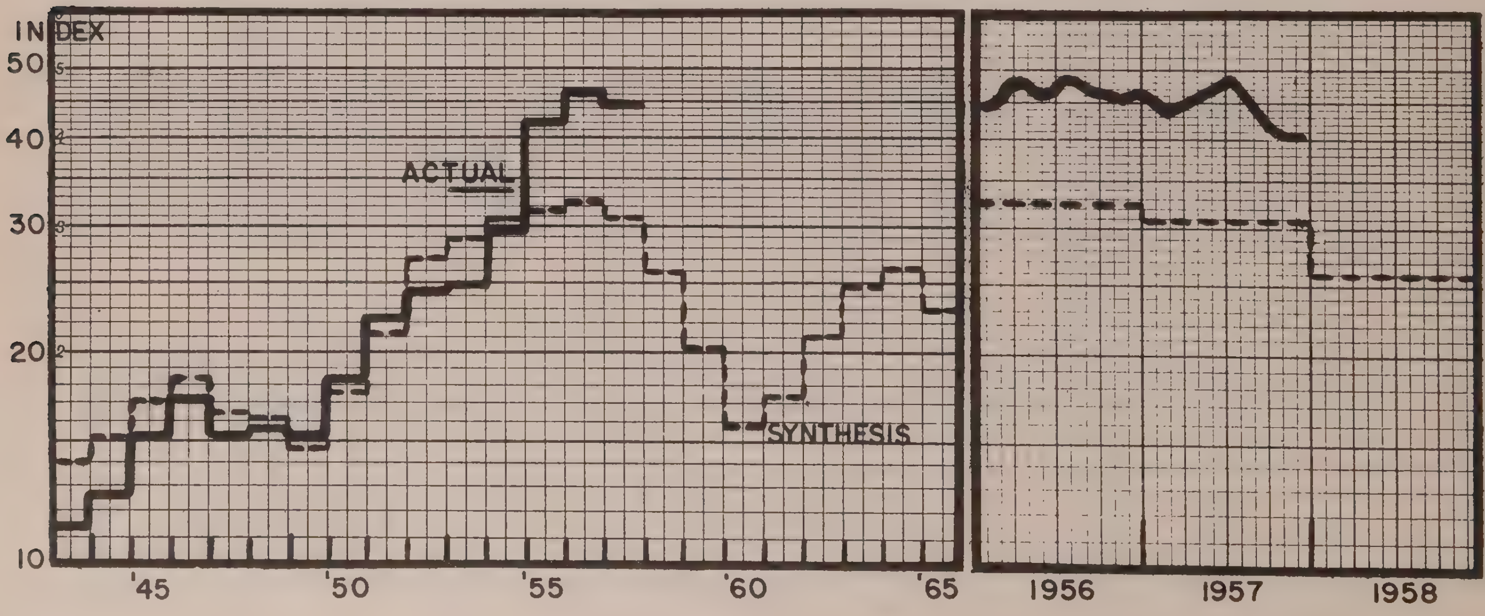
The Dow-Jones Industrial average for the year 1956 was 493.01; for the year 1957 was 475.80, down by 3.5%.

Note that the Standard and Poor's Index is for *Combined* stocks. The Dow-Jones Averages given above are for *Industrial* stocks. The Dow-Jones Averages charted on page 20 are *Combined* stocks.

References

For further details regarding studies of cycles in stock prices, refer to 'Trend and Cycles in Stock Prices' *Cycles*, January 1957, pp. 5-12; 'The 5.91 or 5.92-Year Cycle in Stock Prices,' *Cycles*, April 1957, pp. 93-98; 'The Combination of 11 Stock Market Cycles & Trends,' *Cycles*, July 1957, p. 176.

E. R. D.



RESIDENTIAL BUILDING CONSTRUCTION

CONTRACTS awarded for building construction in 48 states are dominated by a seasonal pattern, by a 32.3-month cycle, and by an underlying trend.

The Cycle and the Trend

The 32.3-month cycle crests ideally in March 1958.

The latest available figures suggest that the underlying trend for March 1958 will be $1,104,000. Estimates of trend should be revised at frequent intervals.

The Calendar Year 1958

Based on this assumption the projected value of residential contracts for calendar year 1958 is $14,131,000,000. If realized, this value will be up 3% from the estimate for calendar year 1957, $13,661,000,000. This runs counter to many expectations.

Year Centering on March 1958

Odds are 8 to 1 that the year centering on March 1958 will exceed $13,248,000,000, if my estimate of the underlying trend is correct.

The array of possibilities, for the year centering on March 1958, (mid-Sept. 1957, to mid Sept. 1958) based on behavior at various past cycle crests, and my estimate of underlying trend, is as follows:

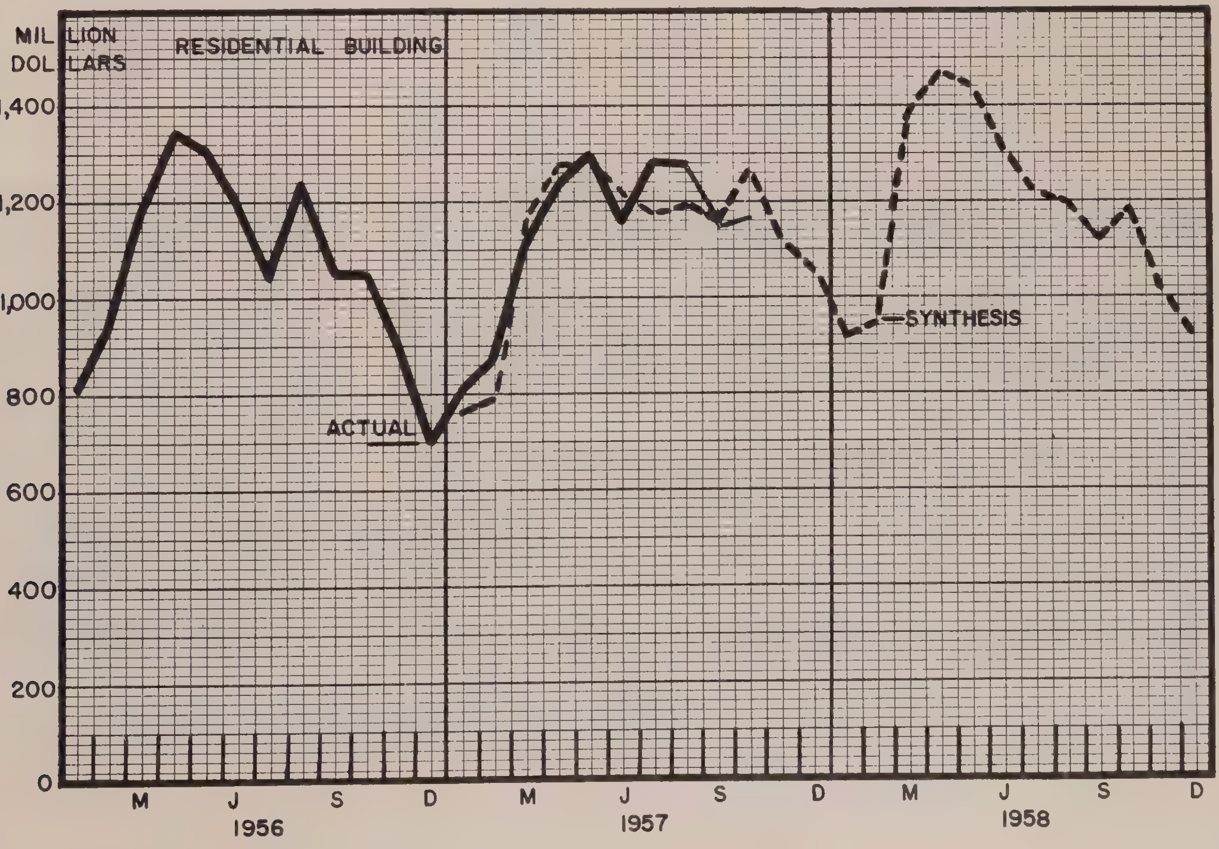
Rank	%	Projected Values (in Billions)
Greatest	17.0	$15,500
2nd	16.2	15,394
3rd	13.5	15,036
4th	13.3	15,010
5th	13.2	14,997
6th	5.0	13,910
7th	3.0	13,645
8th	2.6	13,592
Least	-1.3	13,076

The most probable value for the year centering on March 1958 (based on the average of past percentages), is $14,459,000,000. The odds are 5 to 4 that the value for this year centering on March 1958 will lie between $13,645,000,000 and $15,036,000, if my estimate of the underlying trend is correct.

References

For further details in regard to this cycle in residential building construction, see 'What's Ahead for Residential Building Construction?' in *Cycles* for November 1957, pp. 283-294, and 'December Cycle Round-Up' in *Cycles* for December 1957, pp. 326-27. See also 'The 33-Month Cycle in Residential Building Construction' in *Cycles* for August 1956, p. 228.

E. R. D.



INTEREST RATES

THERE are many cycles in interest rates but so far I have had time to report to you only upon the main one which is about 54 years long, crest to crest.

This cycle, first reported upon by N. D. Kondratieff in 1926, has continued to manifest itself for the 32 years since discovery.

The 54-Year Cycle Now Going Up

The 54-year cycle in interest rates is *upward* at the present time. It suggests that, if this cycle continues to dominate, interest rates should work themselves gradually and irregularly upward until about 1978.

This cycle seems equally applicable to Great Britain and to the United States. Within the United States it seems equally applicable to the various groups (rails, utilities, industrials) and to the various ratings (Aaa, Aa, A, Baa.), insofar as present studies indicate.

Actual Yields

Yields of bonds (Moody's), by groups, for each of the past 20 years are given in the table below:

YEAR	INDUSTRIALS	PUBLIC UTILITIES	RAILROADS
1936	3.50%	3.88%	4.24%
1937	3.55	3.93	4.34
1938	3.50	3.87	5.21
1939	3.30	3.48	4.53
1940	3.10	3.25	4.30
1941	2.95	3.11	3.95
1942	2.96	3.11	3.96
1943	2.85	2.99	3.64
1944	2.80	2.97	3.39
1945	2.68	2.89	3.06
1946	2.60	2.71	2.91
1947	2.67	2.78	3.11
1948	2.87	3.03	3.34
1949	2.74	2.90	3.24
1950	2.67	2.82	3.10
1951	2.89	3.09	3.26
1952	3.00	3.20	3.36
1953	3.30	3.45	3.55
1954	3.09	3.15	3.25
1955	3.19	3.22	3.34
1956	3.50	3.54	3.65
1957	P	P	P

Yields of each group of bonds for the past several months are given below:

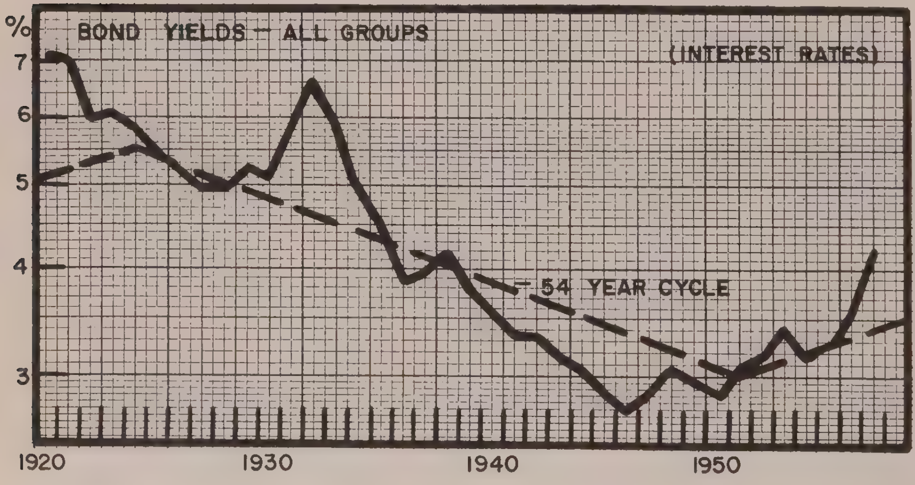
MONTH (1957)	INDUSTRIALS	UTILITIES	RAILROADS
JUNE	4.14%	4.06%	4.26
JULY	4.19	4.19	4.39
AUG.	4.29	4.33	4.49
SEPT.	4.31	4.45	4.56
OCT.	4.32	4.48	4.57
NOV.	4.34	4.49	4.65
DEC.	NOT YET AVAILABLE		

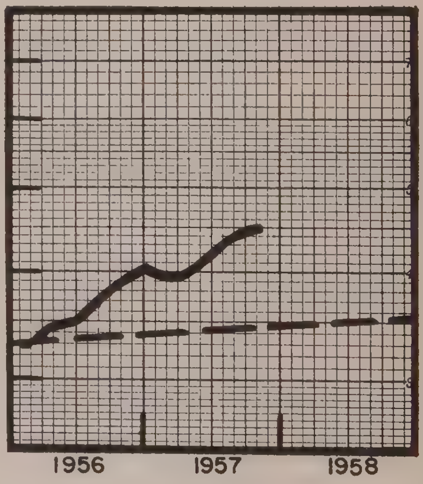
Comment

When this cycle turned up in 1899, most prominent financiers were taken by surprise, but of course at that time no one had told them of this cycle. Regarding the recent turn, they were put on notice 20 years in advance.

References

For further details regarding the 54-year cycle in interests rates, refer to my article, 'What's Ahead for Interest Rates?' in *Cycles* for October 1957, pp. 253-256. *E. R. D.*





FAILURES

COMBINATION of 5 cycles and estimated trend in the liabilities of commercial and industrial failures is upward at the present time. It suggests that failures should be slightly more in 1957 than in 1956 and considerably more in 1958 than in 1957.

Failures An Index

In one way failures are an index of business health. Small failures, business pretty good; large failures, business pretty bad. However the correspondence is not perfect.

Actual monthly average values of the liabilities of commercial and industrial failures for 1956 were $46,891,000.

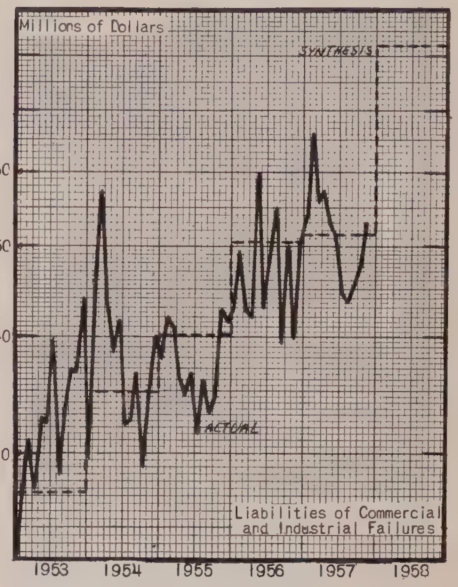
Recent values are:

Month, 1957	Liabilities
June	$51,454,000
July	44,299,000
August	43,514,000
September	45,420,000
October	47,428,000
November	52,899,000
December	not yet available

Reference

For further details regarding the study of cycles in failures refer to 'Trend and Cycles of Business Failures,' *Cycles*, May 1957, pp. 121-139.

E. R. D.



SUNSPOT NUMBERS

MANY of our members have asked me to publish sunspot numbers. This cycle roundup section is a good place in which to do so.

The sunspot cycle is a little over 11 years long. Curiously enough, there is also, as you know, an 11-year cycle in business.

A chart of sunspot numbers, by years and by months, is given below. October 1957 was an all-time high.

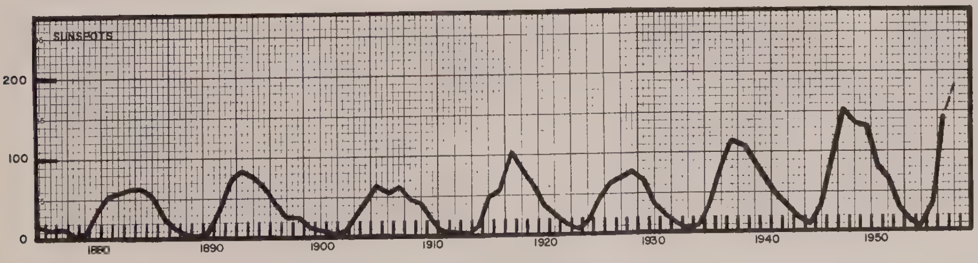
The relative sunspot numbers themselves, by year, 1930-1956 are as follows:

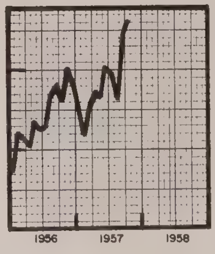
Year	No.
1930	35.7
1	21.2
2	11.1
3	5.7
4	8.7
5	36.1
6	80.4
7	114.4
8	109.6
9	88.8
1940	67.8
1	47.5
2	30.6
3	16.3
4	9.6
1945	33.2
6	92.6
7	151.6
8	136.2
9	134.7
1950	83.3
1	68.9
2	31.1
3	13.3
4	4.2
5	37.9
6	142.3
7	
8	
9	

Relative sunspot numbers by month for 1957 as far as they are available, are as follows:

Month, 1957	Number
Jan.	152
Feb.	117
Mar.	157
Apr.	175
May	165
June	205
July	194
Aug.	163
Sept.	244
Oct.	263
Nov.	
Dec.	

E. R. D.





CORN PRICES

THE 67 1/3-month cycle in corn prices is in an *upward* phase at the present time. It will continue to be so until April 1958. Thereafter it will be in a *downward* phase until February 1961.

Discovered in 1875

This cycle was discovered in 1875 and has continued to manifest itself from then until now. There is no question in my mind but that this cycle is significant.

Prevailed 4 to 1

This cycle in corn prices has prevailed 16 times out of 20 (odds of 4 to 1) since 1899, which is as far back as the monthly figures have been studied.

Strength

In the past, at month of ideal high, corn prices have ranged from 11% below trend to 46% above trend. The various months of ideal high and the percentages by which corn prices were above or below trend at these months are shown in the following table.

Month of Ideal High	Percentages Above or Below Trend at Ideal Times of High
Aug. 1924	46
Mar. 1902	30
Apr. 1930	23
Oct. 1907	16
Jan. 1919	14
Sept. 1952	9
June 1941	3
June 1913	-6
Feb. 1947	-7
Nov. 1935	-11

As you can see, the most typical (the middle) value is 11.5% above trend. The mean is 11.7% above trend. Ideal highs are 26½% above ideal lows.

Actual Highs

Actual highs of course rarely come at ideal timing. In the majority of instances however they have come within 11 months one way or the other of ideal timing.

Trend

If we adjust for this cycle we can get some idea of the underlying trend. The underlying trend is the axis around which the cycle oscillates.

The underlying trend is *downward* at the present time. In fact it is so steeply downward that it will be hard for the cycle to prevail in the present instance.

Current Prices

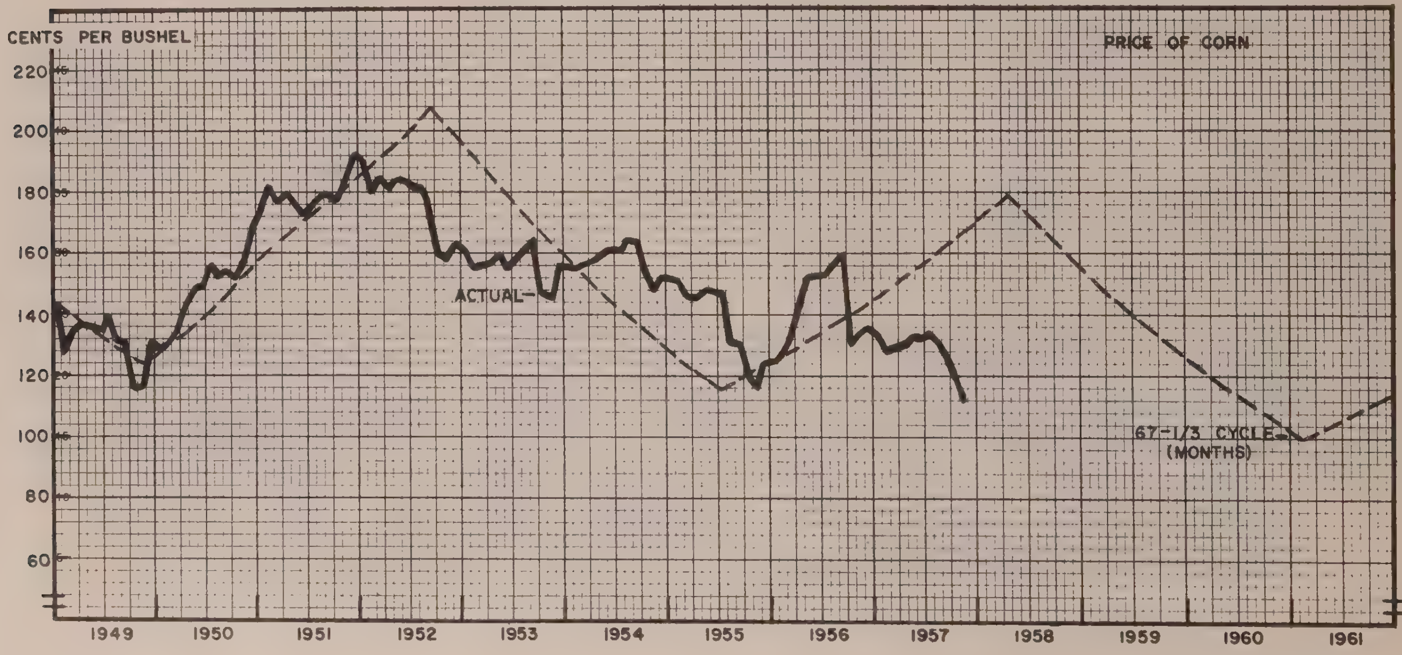
Recent values of No. 3 yellow corn at Chicago are:

Month 1957	Dollars
July	$1.337
Aug.	1.312
Sept.	1.262
Oct.	1.189
Nov.	1.157
Dec.	Not available

Comment

It is clear that the upturn of prices called for by this cycle has not yet shown itself. This fact suggests either (1) that this time the actual high will be late, or (2) that the underlying situation is so weak that the cycle has been offset.

For a full account of this cycle see 'What's Ahead for Corn Prices?' *Cycles*, June, 1957, pp. 149-158. *E. R. D.*



COPPER PRICES

SIX cycles have been isolated in copper prices, 1784--1953. Five of these cycles have been projected into the future and combined. The combination is *upward* to a peak in the second quarter of 1958, then *downward* through 1958, 1959, and into 1960.

The Six Cycles

The length, strength and timing of each of the six cycles are as follows:

Length	Strength (Average Percentage Above Trend At Times Of Ideal High)	Timing (Date of Current Ideal High.)
32.36 mo.	2.33%	1958.4
8.6 yr.	11.9	1950.8
9.28 yr.	14.3	1956.0
12.53 yr.	8.4	1953.03
14.8 yr.	5.7	1960.7
54.0	39.	1971.75

Only the first five cycles have so far been used in the synthesis. The 54-year cycle will be added at a later date.

Timing Pretty Good;
Strength Pretty Bad.

As you can see by reference to the chart, the *timing* of the fluctuations of copper prices has corresponded quite well to the timing of the synthesis, but the *amplitude* of the fluctuations has greatly exceeded the *amplitude* of the synthesis. It is possible that techniques now under investigation will enable us to get a more realistic measure of amplitudes in future studies.

I have a hunch that the reason that the cycle projection is too weak is because we considered the cycle to be of absolutely uniform length over the entire span of 170 years. The proposed techniques will allow the cycle to vary a little in length. This procedure will allow the average strength (amplitude) to be greater.

This particular study was completed in the first quarter of 1954. The projection shown has not been changed since that time.

Recent values for electrolytic copper bars, New York are, shown in the table in the next column.

The December price is a guess based on the fact that *primary* copper prices went *up* slightly.

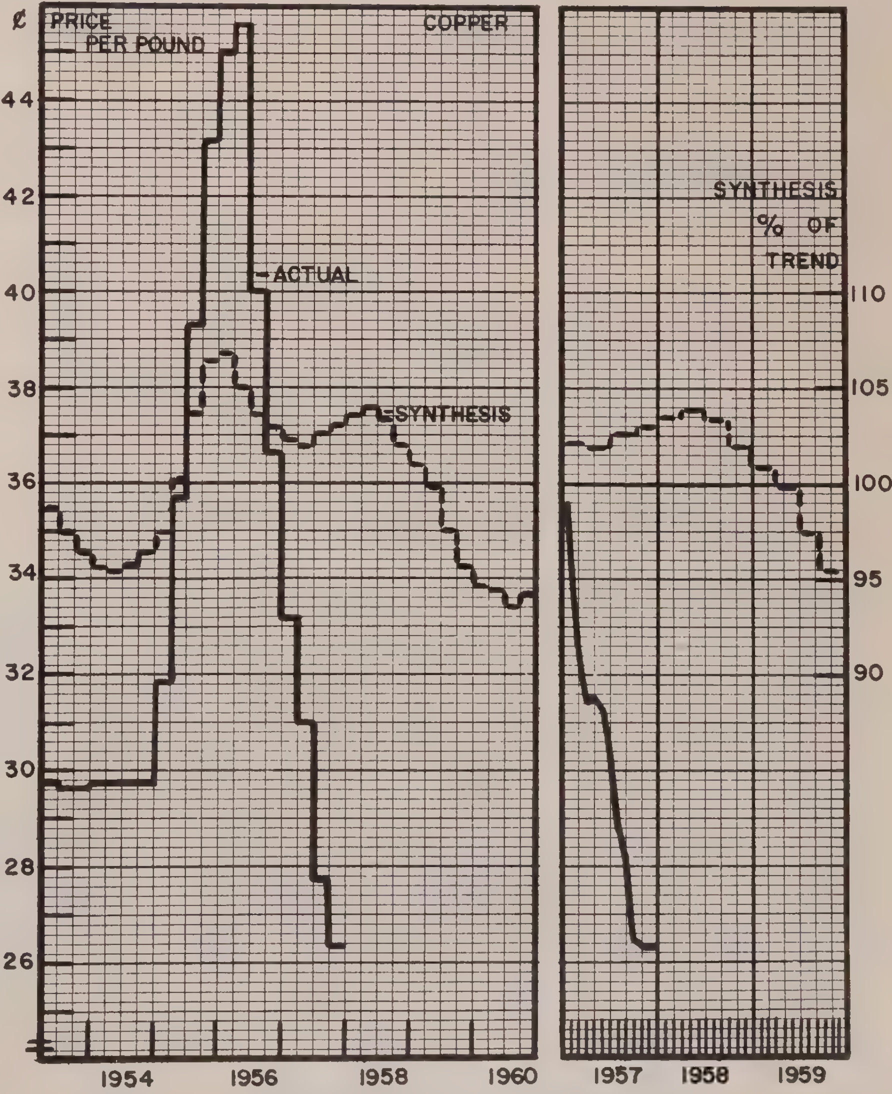
Copper Prices

Month 1957	Cents per pound
August	28.10
September	26.44
October	26.34
November	26.34
December	26.34 est.

References

For further details in regard to this study refer to 'A Projection of Five Cycles in Copper Prices,' *Cycles*, August 1957, pp. 214-215.

E. R. D.



WAR

THE International Battle Index is due to increase importantly during the next few years, if the 11- and 22-year cycles in this index continue to dominate the war picture as they have for so many years in the past.

The Index of International Battles

The Index of International Battles was developed a number of years ago by Professor Raymond H. Wheeler of the University of Kansas. He and a staff of workers searched all available historical records. To every mild battle he gave a value of 1; to every average battle he gave a value of 2; to every especially heavy battle he gave a value of 3. The index value for any given year is the sum of these values for that year.

Professor Wheeler also developed a Civil War Battle Index, but that does not concern us here.

Index Ends in 1950

Professor Wheeler's Index ends in 1950. I have asked him to bring it up to date. If he does so before we go to press, I'll add the additional values to the chart. If not, the chart will have to end in 1950 for the time being.

The Cycles

The Index of International Battles goes back year-by-year to 599 B.C. The 22-year cycle is present on the average in each part of it all the way back. I have traced this cycle back wave-by-wave to A.D. 1400. I have traced the 11-year cycle back to A.D. 1750. There is absolutely no question in my mind in regard to the significance of these two cycles in these figures. Cycles of 57 and 142 years in length have also been found. The lengths, strengths, timings of these four cycles are shown in the following table:

Length in Years	Strength (In Percent Above Trend)	Timing (Date of An Ideal High
11 1/5	198%	1960
22 1/7*	257%	1963
57	251%	1975
142	248%	1950

*Over the whole period, 599 B.C. to date the length is 21.95 years.

The chart below shows the values of the Wheeler International Battle Index, 1850—1950, and, by means of a broken line, the synthesis of the four cycles.

The Projection

As you can see, the curve showing the combination of cycles rises rapidly to a plateau of high intensity during the early 1960's. Very dangerous times lie *immediately* ahead.

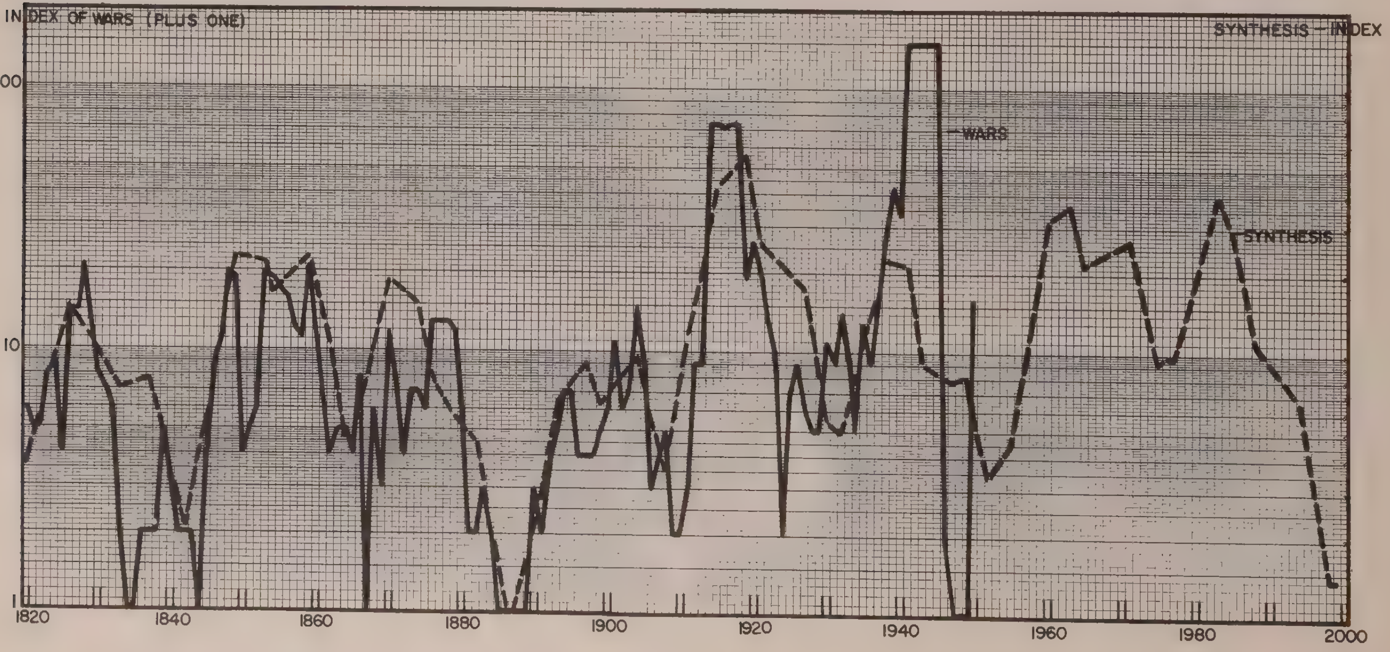
My Most Important Work

I consider the work I have done in respect to cycles in war by all odds the most important achievement of my lifetime. You and the rest of our countrymen have been warned, at least constructively. If, collectively, our nation has more interest in new tail-fins than in new missles, I can't help it. But when THE DAY comes, don't say (if you are alive to say it!) that I didn't tell you.

References

For the Index values 599 B.C. forward see the Foundation Basic Data Bulletin No. 1, published as a supplement to *Cycles* for February 1951.

E. R. D.



WHEAT PRICES

WHEAT prices act as if they were influenced by a number of cyclic forces. The most important of these, and the best substantiated, is one about 9.3 years long. This cycle is *downward* at the present time. It is due *ideally*, to be at the very bottom of the cycle in February 1960, but of course the *actual* bottom of the cycle is almost certain to come before or after this date.

In the past, prices at time of ideal low have, 7 times out of 8, been lower than prices at the preceding time of ideal high. Assuming the significance and continuation of this cycle in these figures this means that barring war, the odds are 7 to 2 that the price at the next time of ideal low, February 1960, will be lower than the price at the last time of ideal high, June-July 1955. As the price then was $2.68, the odds are, as stated above, that the February 1960 price will be down.

Previous gains, on the short side, from February 1867 to date, from time of ideal high to time of ideal low, ranked in order of size, are as follows:

135.7%
79.6
78.3
23.3
20.4
12.4
12.0
-24.8
-27.6

Applying these percentages to the price of June-July 1955 we get the following array of possibilities for February 1960:

1.14
1.49
1.50
2.17
2.22 Median
2.38
2.39
3.34
3.41

The median is the middle value.

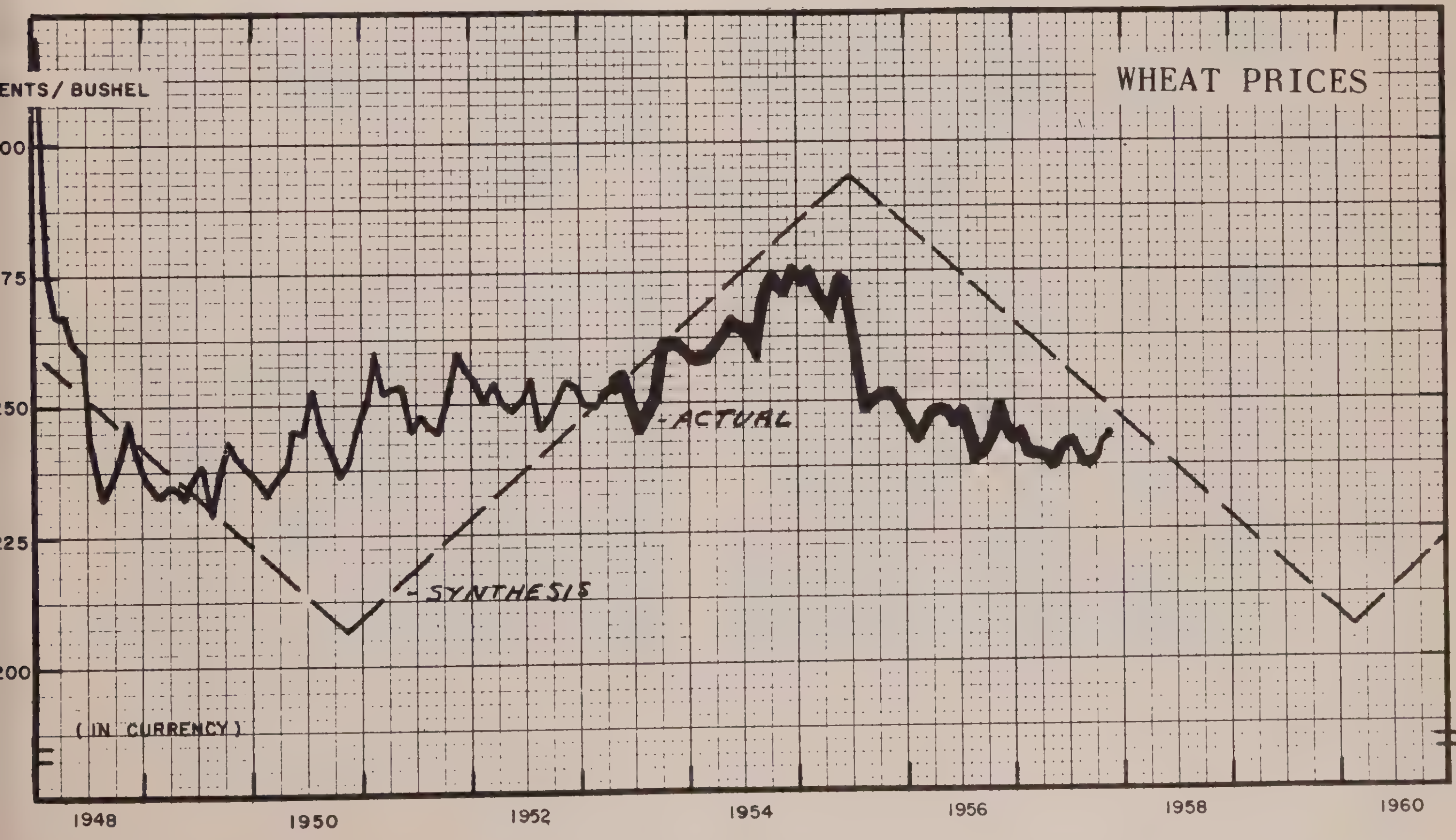
Recent prices of No. 1 Dark Northern Spring wheat at Minneapolis are:

Month	Price Dollars/bu.
June	$2.416
July	2.435
August	2.361
September	2.382
October	2.428
November	2.439
December	Not available

I know that traders are interested in *futures* prices in Chicago, not cash prices in *Minneapolis*. Futures prices can not be used for cycle study as they do not provide a continuous series of figures, but I'll try to get cash Chicago prices for you in an early issue.

For further details concerning this cycle see 'What's Ahead for Wheat Prices,' *Cycles*, September 1957, pp. 229-235.

E. R. D.



Foundation Affairs

The Library

I AM diverting a part of the contribution money to library research. We are starting with our own cycle library material.

First we had to put our material in order. We now have it on shelves and in file drawers, completely alphabetized by author, and indexed by author and by co-author. We find that we have 2025 books, pamphlets, reprints, article, etc. pertaining to cycles. This material is by 550 different authors.

The cost of our library to date has been $718.43.

Second, we have classified and cross-indexed this material by branch of science. We find that we have the following number of references:

Astronomy and Astrophysics	295
Climatology and Meteorology	295
Botany and Dendrochronology	155
Zoology	444
Geology	135
Sociology	105
Medicine	167
Economics	377
Other	169

Of course these numbers total more than 2025 because any one work often deals with cycles in more than one science.

If you have any clippings, articles, reprints, books, manuscripts, or other material pertaining to cycles that you are willing to give us for our library, the gift would be greatly appreciated.

The Directory

WE plan to separate our 550 authors into those who have contributed to the knowledge of cycles, rhythms, and/or periodicities, and those who have merely mentioned the work of others. The contributors will be further divided into the living and the dead. The living contributors will constitute our revised Directory. Funds permitting, we will publish it.

The Cyclopedia of Cycles

ONCE the directory is out of the way, or perhaps collateral with it, we plan to organize our own library material into the oft-talked-of Cyclopedia of Cycles. We shall proceed by branch of science, subdivided by phenomena, each phenomenon further broken down by alleged cycle length. References will be given.

When all fields of science have been covered we will cross-index the alleged cycles by wave length.

This method of approach will enable us to publish the results of our work piecemeal, instead of having to wait until the whole job is finished. Present plans are to publish in the *Journal of Cycle Research,* our quarterly scientific publication.

Of course a cyclopedia of this sort, based merely on the references that happen to be in our library, will be a very spotty affair. To do the job right we should supplement our own material with references from a good college or public library. However, a cyclopedia based on our own material will be better than nothing. Moreover, by blazing the way, it may enable us to get the funds to do the job the way it should be done.

THE BEGINNER'S CORNER

FINDING CYCLES

IN previous installments of this series of articles I told you about charts and charting. I explained the difference between arithmetic line charts and ratio line charts. I told you that for purposes of cycle analysis you should almost always chart your numbers on ratio scale.

The only exceptions are (1) where the variations between your largest number and your smallest number is small—say not over 20%, or (2) where you perfer to chart the logarithms of your numbers instead of the numbers themselves.

Finding the Cycle

Having made your chart, how do you find your cycle?

Inspection

The easiest way is simple inspection. If you have an eye that is reasonably good at judging uniform horizontal distances, see if you can see *areas* of strength, preceeded and followed by *areas* of weakness, spaced with reasonably regularly across your chart.

Pencils

It sometimes helps to put the chart flat on a desk and lay pencils upon the most promising peaks (or troughs.) Move the pencils about until they look more or less equidistant from each other. See Fig. 1 below. This method was devised by Charles H. Pinkham of Boston.

Thumbing

I find it preferable to do what I call "thumbing" (See Fig. 2). Hold the point of a pencil at one crest (or trough); your thumb nail on the pencil at another. Then, keeping the thumb nail on the pencil, move the point of the pencil to the place where your thumb nail was. See if your thumb nail is now at another crest (or trough). And so on across the page.

As you move your pencil and thumb, the interval you have measured off on the pencil may seem too short or too long. If so, vary it appropriately until you get one length that pretty well fits all the crests (or troughs).

You will often find it helpful to measure off *two* waves from the point of your pencil to your thumb nail. You can then move your thumb nail and pencil over *two* crests to see if you mark off two more waves, and so on. You can also measure off three waves, or four.

The only purposes of the thumb and pencil technique are (1) to help your eye to measure reasonable regular horizontal distances, instead of getting fooled, and (2) to provide a measure that can be changed easily and at will.

Other and more accurate techniques will be discussed in another installment.

E. R. D.

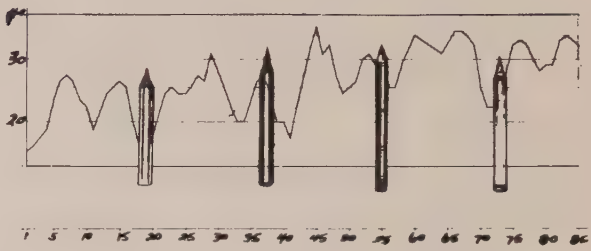


Fig. 1. Pencils may be laid on apparent areas of high and low to aid the eye in noting possible rhythm and wave length. The several pencils mark off areas of high and indicate a possible 18-year cycle. (This curve is a constructed one having a strong 18-year cycle along with 7, 5, 8, 0, and 10.0-year cycles).

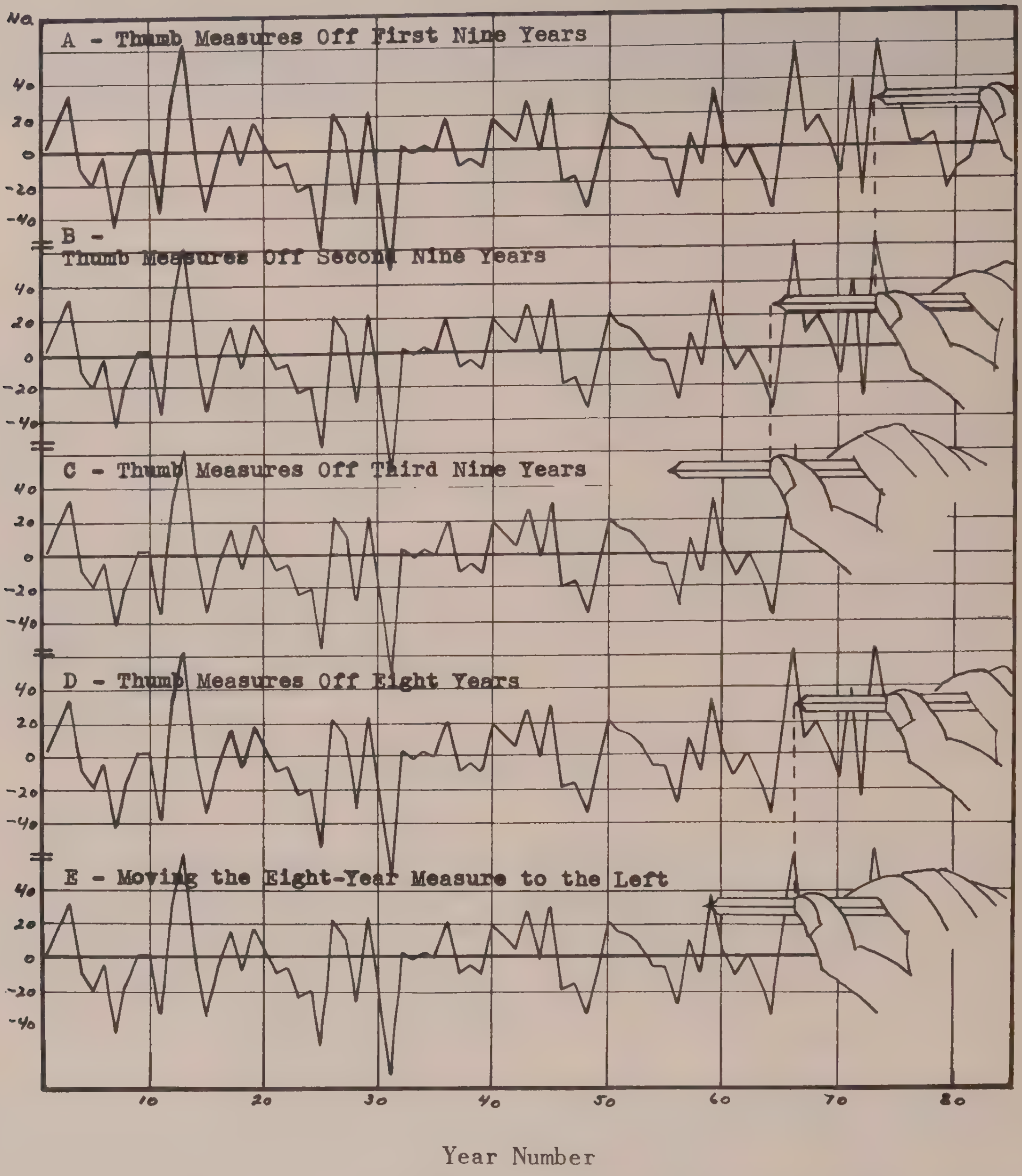


Fig. 2. An Illustration of 'Thumbing' as a means of getting hints of cycle lengths.

The curve is a constructed one made up of an 8-year cycle and randoms.

The first wave at the right is about 9 years long, so nine years is measured off on the pencil (A). We then move thumb and pencil to the left one wave (B). The result is not too good, but we go on (C). The pencil point is even more out of step.

Now we reduce the span to 8 years and start over. The measurement of the first wave is not shown, but the second one is (D), and so on in the third (E). As we go across the page 8 years proves to be the right length.

Try it yourself with different lengths, using Curve A to practice on. There is nothing in this curve but an 8-year cycle and randoms.

From *How to Make a Cycle Analysis*, by Edward R. Dewey, copyright 1956, Lesson VI, page 27.

THE MODIFIED GEISINGER INDICATOR

THE Modified Geisinger Indicator is a series of numbers which, in the past, have gone up and down ahead of corresponding movements of the Federal Reserve Board Index of Industrial Production. Thd Modified Geisinger Indicator thus throws some light on the probabilities of the future.

The F. R. B. Index of Industrial Production measures physical production in the U. S. A. It is a weighted average of tons, yards, gallons, and numbers of things produced each month.

The Modified Geisinger Indicator is the sum of two Indicators, the Geisinger Indicator and a First Difference Indicator.

The Geisinger Indicator was invented by Robert Geisinger. It is derived from figures which are published each month in the *Survey of Current Business*. It is charted for you as Curve A on pages 34 and 35.

Curve B on these same two pages charts the First Difference Indicator, which is merely the amount by which the smoothed F. R. B. Index is above or below the value for the preceding month. The smoothing is effected by means of a centered 3-month moving average and a 2-month moving average posted to the second position.

Curve C charts the sum of the values of Curves A and B. This curve is called the Modified Geisinger Indicator. It suggests in a general way what the F. R. B. Index may do some eight months later.

Curve D charts the values of the F. R. B Index of Industrial Production.

Curve E re-charts curve C, advancing it by 8 months. This advance is for two reasons (1) so that you can more easily compare the past behavior of the Modified Geisinger Indicator with the behavior of the F. R. B. Index, and (2) so that you can have a better idea of what the F. R. B. Index may do in the future.

Forecast

INDUSTRIAL production for October 1957 stood at 141 (revised value); for November 1957 it was 139. Barring the steel strike value of 136 in July of 1956, the current value of 139 is lower than any value since July of 1955. However, let's not lose our sense of perspective. The current rate is still 39% above the values of 1947-49, and only 5½% below the all time high of December 1956 (147).

All three indicators continue to drift along below the zero line, as you can see from the table below and the lines on the chart on the next page. However, insofar as the figures are available, it looks as if the values for September 1957 and October 1957 (May 1958 and June 1958 when projected) might be importantly lower. The ranges within which the indicator will lie for these months (barring revision of published figures) are shown by the vertical bars.

As I said in my letter of November 29th 1957 (sent by first class mail to those members who pay $3.00 a year extra for this special service), 'It looks to me as if the Geisinger Indicator were turning down. Caution is suggested.'

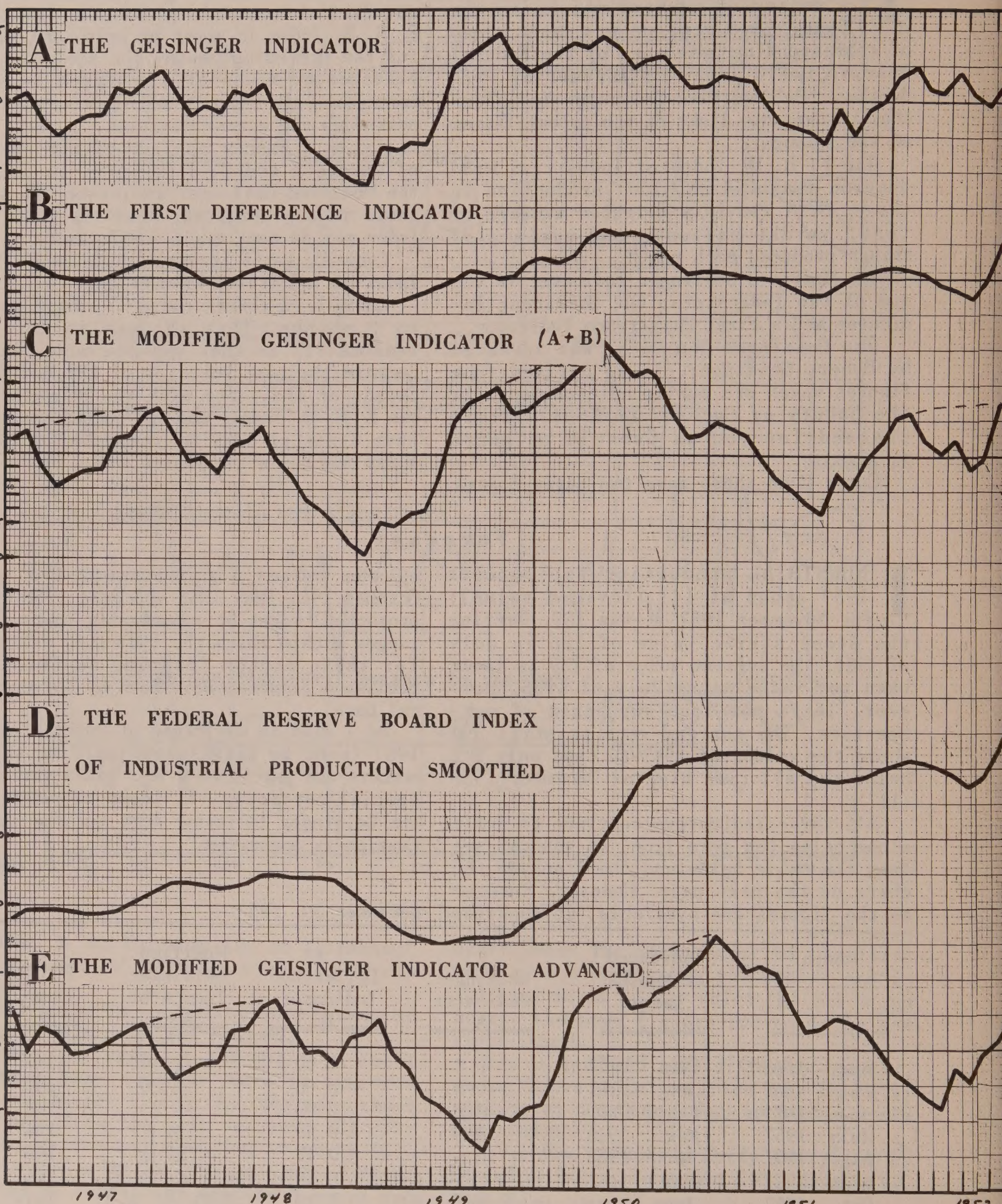
E. R. Dewey

December 30, 1957

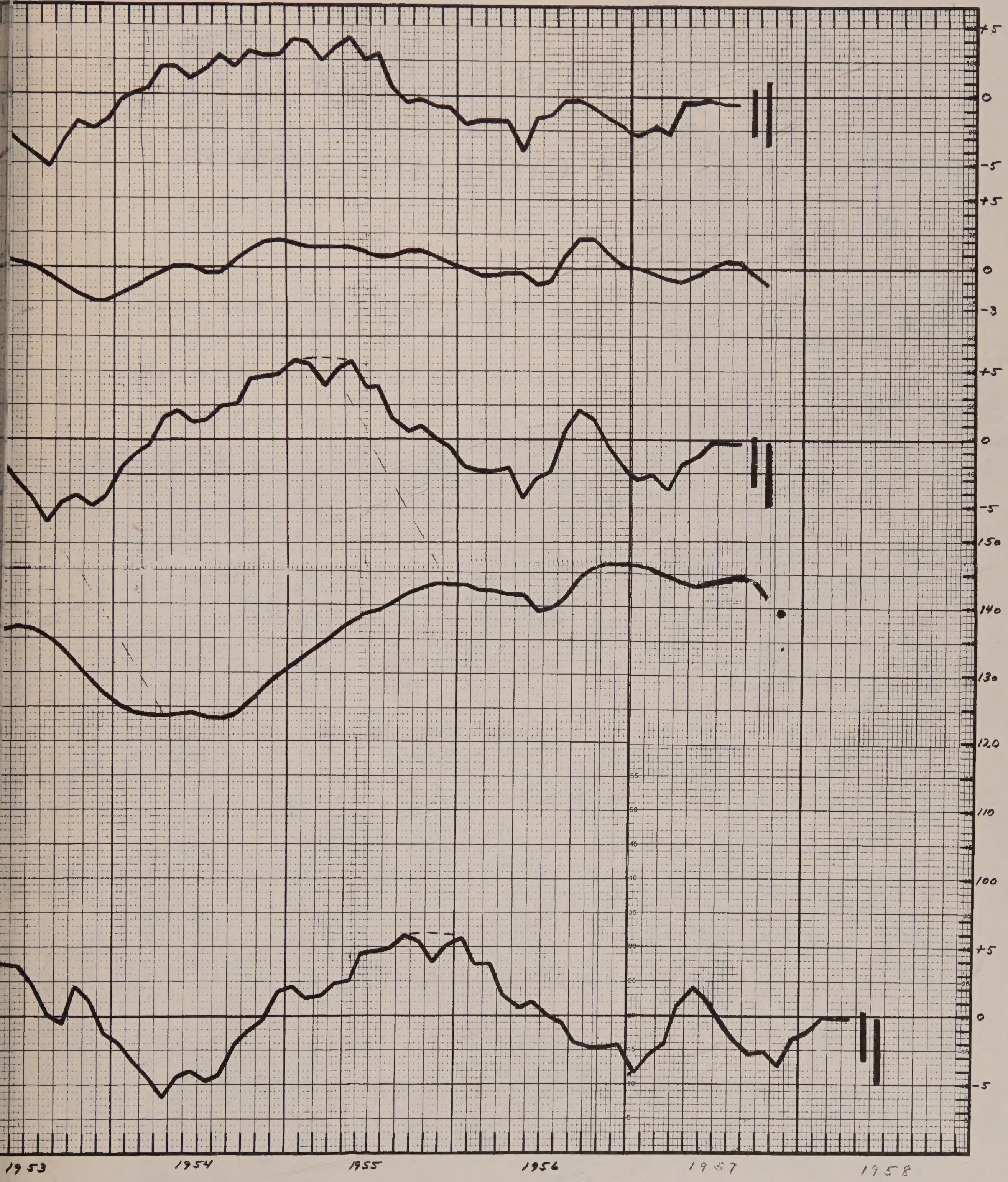
Month	Advanced (8 Months Later)	Geisinger Indicator A	1 st Difference Indicator B	Modified Geisinger Indicator A+B	F.R.B. Index D
Apr. 1957	Dec. 1957	-0.8	-1.00	-1.80	143
May 1957	Jan. 1958	-0.6	-0.66	-1.26	143
June 1957	Feb. 1958	-0.2	0.00	-0.2	144
July 1957	Mar. 1958	-0.6	+0.50	-0.1	144
Aug. 1957	Apr. 1958	-0.6	0.33	-0.16	145
Sept. 1957	May 1958	(+0.8 to -2.8)	-0.50	(+0.3 to -3.3)	144
Oct. 1957	June 1958	(+1.2 to -3.6)	-1.33	(-0.13 to -4.9)	141r
Nov. 1957	July 1958	*	*	*	139p

p - preliminary r - revised - not yet available

THE MODIFIED GEISINGER INDICATOR



OF INDUSTRIAL PRODUCTION



Turn to page 33 for the forecast.

Mr. H. A. Musham
741 No. Rush St.
Chicago, Ill.

DON'T YOU WANT TO KNOW

HOW TO MAKE A CYCLE ANALYSIS?

Edward R. Dewey, our Director, has written 23 lessons telling *How to Make a Cycle Analysis.* These lessons give you the essence of what Mr. Dewey has learned in this field in 20 years of study and work.

These lessons are the ones used in the correspondence course we gave in 1955 and 1956. (The correspondence course as such is no longer being given.)

The lessons start at the beginning and assume that you are a high school graduate with no knowledge of mathematics beyond arithmetic.

Four lessons are devoted to a study of the elementary statistics needed as a prerequisite for cycle study. These lessons are supplemented by parts of a college text book of statistics, also provided.

Nineteen lessons are devoted to the techniques of cycle analysis as such. Most of this material is unavailable from any other source.

The lessons are supplemented by additional comment and material which grew out of questions and mistakes of correspondence course students.

Problems are provided for the student to work, but *no papers will be corrected.* We are *not* offering a correspondence course.

The lessons are mimeographed on 8½ x 11 paper, punched for 3-hole binder. Printed charts are provided. Other printed material is included. There are over 600 pages in all, plus the text book on statistics referred to above.

The price for all the material and the text book is fifty dollars, cash with order.

Free examination for 10 days permitted. If not entirely satisfied you may return within that time for full refund.

Send in your check today and a set of the lessons will be prepared for you.

FOUNDATION FOR THE STUDY OF CYCLES

East Brady, Pennsylvania